January 20, 1992

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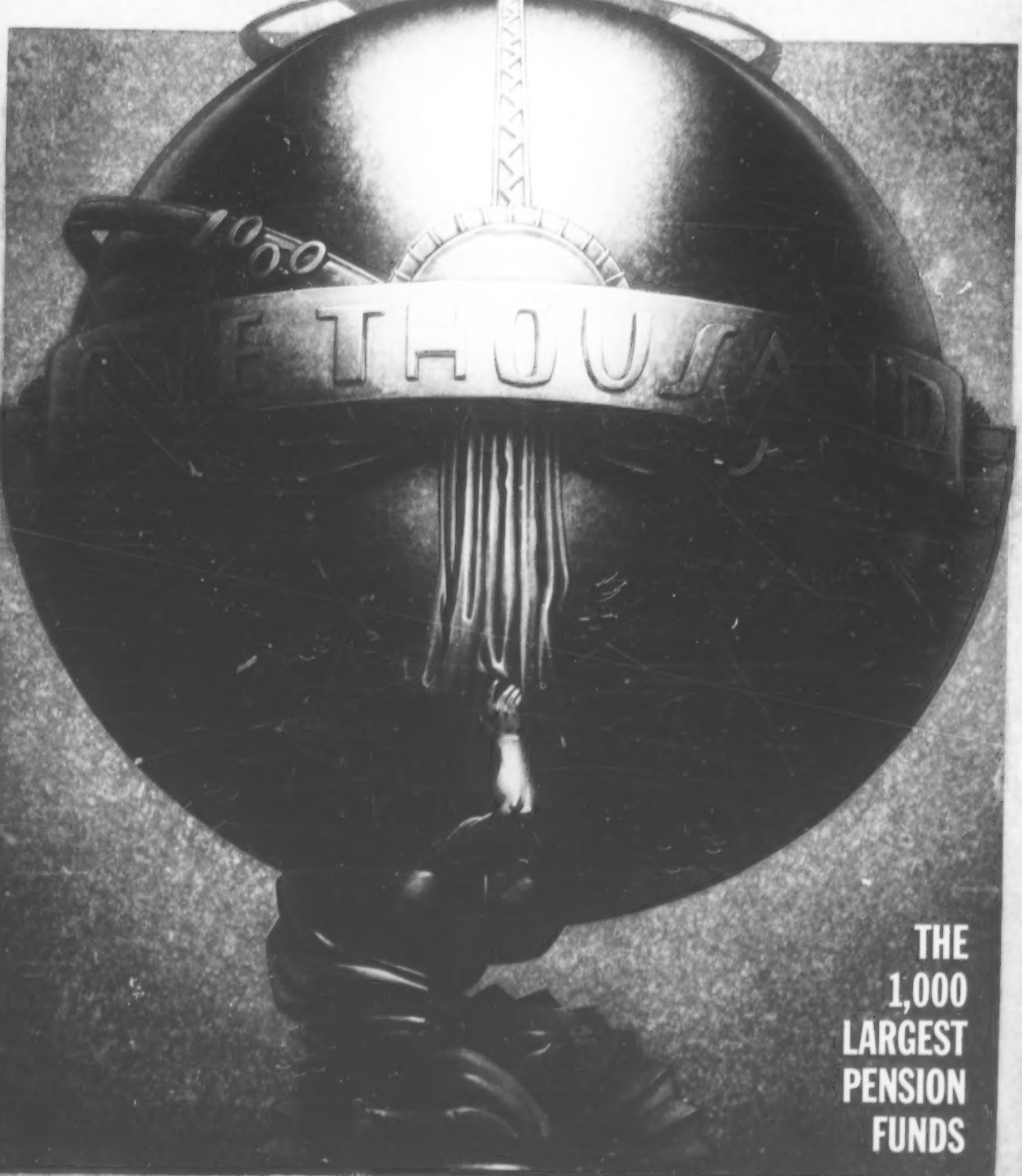

THE 1,000 LARGEST PENSION FUNDS

NEWS DIGEST

DEWITT F. BOWMAN

LINDA SUE SCOTT

DeWitt Bowman, chief investment officer of the California Public Employees' Retirement System, is tackling a new investment frontier — development of single-family housing. Page 4.

SPECIAL REPORT: THE TOP 1,000 FUNDS

Assets of the nation's 1,000 largest pension funds rise 16.6% — to $2.188 trillion as of Sept. 30 — boosted largely by kind capital markets. Page 1.

International investments by the Top 200 U.S. pension funds gallop ahead, spurred by strong markets and continuing new and expanded outlays. Page 17.

FINANCING

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INTERNATIONAL

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REAL ESTATE

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Adviser survey gets under way

Questionnaires for *Pensions & Investments'* annual survey of investment managers will be mailed shortly. The completed forms, to be used for a special issue published May 18, must be returned by Feb. 25. If you want to be on the mailing list, or if you have any questions, contact Christine Philip, directory coordinator, at (312) 649-5217.

Fund boosts private deals

Irish placement is 3rd for Pennsylvania Public Schools

By Barry B. Burr

HARRISBURG, Pa. — The Pennsylvania Public School Employes' Retirement System invested $100 million in a private placement issued by GPA Group PLC, a leading worldwide aircraft leaser based in Shannon, Ireland.

The pension fund's purchase of a new issue of convertible cumulative preferred stock gives it the equivalent of 2.5% ownership and makes it GPA's 10th largest shareholder on a fully diluted basis, according to Richard H. O'Toole, GPA managing director-corporate affairs.

The GPA deal was the third — and largest — privately placed issue in which the Pennsylvania fund has invested since it began doing private placements directly with issuers about six months ago, said John C. Lane, the system's chief investment officer.

The pension fund hopes to place 2%, or $400 million, of its $20 billion in assets into private placements by the end of 1992, he added, believing it's an asset class ripe with opportunities to make above-average returns. In the three deals, the fund has invested a total of $175 million.

"There is a void left out there from insurance companies and banks," said Mr. Lane. "They are staying away because of equity problems." As a result, "we're getting the cream of the crop" of private placement deals to consider, he added.

The $400 million goal, if reached, would rank the Pennsylvania system's private placement program as the seventh largest among the U.S. largest pension funds, according to *Pensions & Investments'* annual report on the 1,000 largest pension funds.

Its two other direct private placements were completed in the third quarter of last year, Mr. Lane said. Its first was a $50 million debt issue by Adult Community Total Services, West Point, Pa., a company that operates retirement complexes in Pennsylvania, Florida and North Carolina. The debt has an incentive kicker that gives the fund a share of the proceeds of the sale of each housing unit.

In its second deal, the fund bought a $25 million equity stake in the form of a convertible preferred stock, issued by College Construction Loan Insurance Association, Washington. Connie Lee, as it is known, is an insurer of buildings used by educational organizations.

"The pension fund's private placement program seeks out well-run, quality growth companies with proven management," Mr. Lane said, emphasizing the fund's high regard for GPA's management.

Two consultants — Weymouth & Associates, Radnor, Pa., and Blue Bell Corp., Blue Bell, Pa. — assist fund officials in analyzing private placements.

The GPA deal, which was closed Dec. 31, was placed by Merrill Lynch & Co., New York. It was GPA's first direct placement with a pension fund, Mr. O'Toole said. The deal wasn't made under Rule 144A, which allows some restricted trading in privately placed issues. Rather, he said, "This was a pure private placement, with a single sophisticated investor."

GPA, which Messrs. Lane and O'Toole call the leading aircraft leaser in the world, issued $100 million in new convertible cumulative preferred stock, convertible no later than 2002 into common

See **Private** *on page 82*

Active managers finally top market

Small-cap stocks, good sectors pay off

By Fred Williams

Most active equity managers outperformed the stock market in 1991 for the first time since 1988, largely because they were invested in smaller stocks and better performing sectors.

For the 12 months ended Dec. 31, 53% of the managers in the INDATA universe outperformed the benchmark Standard & Poor's 500 Stock Index. In 1990, only 46% of the INDATA managers outperformed the S&P.

Executives of other consulting firms said their statistics are likely to show active managers in their universes outperformed the market last year. At press time, however, none was able to provide year-end numbers.

Carter Harrison, executive vice president at DeMarche Associates Inc., Westwood, Kan., said he expects between 55% and 60% of active stock managers in DeMarche's universe to beat the S&P 500.

Michael Wright, consultant with Wyatt Asset Services, New York, said 75% of the 81 money managers reporting year-end results to Wyatt so far have outperformed the S&P. For the first nine months of the year, about 60% of the 425 money managers in the Wyatt universe outperformed the index.

For the first nine months of 1991, 54% of the approximately 500 equity managers in the Wilshire Cooperative data base outperformed the S&P, said Richard Holbein, principal at Holbein Robertson & Associates, a Dallas consulting firm.

"We are in an era again when being large is no longer beautiful. The market is shifting to a cyclical stage, where medium- and small-capitalization stocks should again outperform the large caps, and it should stay that way for several years," said Mr. Holbein. Many equity managers are more heavily weighted in smaller stocks than is the S&P.

Only four industry sectors — consumer cyclicals, consumer staples, financials and transport and services — outperformed the S&P 500, which was up 31.2% for the year.

Equity managers were overweighted in transport and services and financials, market weighted in consumer cyclicals and near market weighted in consumer staples, according to William T. Kennedy, president of the Atlanta pension consulting firm W.T. Kennedy Inc.

Mr. Kennedy analyzed the data from INDATA, a Southport, Conn., equity research service with 1,200 active equity managers with total assets of $228 billion in its universe.

Mr. Harrison cited several reasons for the improved performance of active stock managers.

"Foremost is that the market has shifted dramatically. . . . We went from an asset-play market to a growth market, where earnings fundamentals became more important to stock prices. This is the type of market where active managers can use their expertise," Mr. Harrison said.

In addition, he said, the market trends shifted toward rewarding risk, allowing managers to turn to small-cap stocks, higher price-earnings and lower yielding

See **Active** *on page 84*

Insurers pressured on GICs

By Anne Schwimmer

Pension funds stepped up pressure on insurance companies following a Minnesota Guaranty Board decision to make up losses suffered by state residents whose pension funds hold GICs issued by Executive Life Insurance Co.

Pension fund members of the Group Annuity Participant Protection Association, which represents $770 million of the approximately $1.1 billion in Executive Life pension guaranteed investment contracts, reacted to the Minnesota decision by lobbying individual insurance companies to ask other guaranty associations to make up the shortfalls. If all pension fund GIC holders are made whole, it would cost about $308 million.

James Corcoran, a partner at Wilson, Elser, Moskowitz, Edelman & Dicker, New York, said GAPPA members are threatening to stop buying GICs from those insurers if the contract holders truly are not guaranteed their principal.

Mr. Corcoran formerly was superintendent of insurance in New York state.

He said GAPPA members are meeting with executives from Prudential Insurance Co. of America, Metropolitan Life Insurance Co., New York Life Insurance Co., Massachusetts Mutual Life Insurance Co. and John Hancock Mutual Life Insurance Co.

See **GICs** *on page 83*

PEOPLE

Monks forgoes pennies, offers his thoughts on world

TOM REED

Activist Robert Monks says his "feelings got hurt" in his fight with Sears Chairman Edward Brennan.

■ Robert A.G. Monks is crisscrossing the country to drum up interest in a commingled fund he hopes will influence corporate governance practices.

Never one to shy away from an opinion, Mr. Monks also offered up these tidbits:

- On Henry Kravis, the leveraged buy-out whiz: He's "a monster," not just a rich person. The difference: A monster is "someone who needlessly inflicts pain on someone."
- On running for a seat on the Sears, Roebuck & Co. board: "I didn't like it . . . Frankly, my feelings got hurt." Edward Brennan, Sears' chairman, used "low-class stuff" to discredit him, Mr. Monks said.
- On consulting firms: "ERISA, a wonderfully idealistic statute in a lot of ways, has some very negative characteristics. And one of them is that is has enriched an industry of people that are not terribly productive, i.e. consultants. Everyone has to go to them to get their approval or else they'll feel obligated to destroy you in order to prove that they're powerful."
- On the economy and the use of pension funds: "There's no way to have a pension system that is healthy when the economy isn't healthy," Mr. Monks said. He dismissed proposals to stimulate business investment through tax credits, saying: "Half the world is tax exempt." He said pension assets represent "a ton of liquid money that is available" for investment.
- On Robert Monks: "Once I can make the credible connection that governance can make money, I'll be fine."

— Nancy K. Webman

INTERNATIONAL

DAM acquisition fills product gap in Alliance line

Carol Zipkin said passive, small-cap products should do well in coming months.

■ Alliance Capital Management L.P. has added a passive international, small-capitalization equity approach to its index fund capability after acquiring London-based Dimensional Asset Management Ltd. in December.

"This was the one area in which we had not secured any appointments," said Carol Zipkin, senior vice president at Alliance.

DAM, now a subsidiary of New York-based Alliance, provides advisory services to pension funds in the United Kingdom, continental Europe and Australia as well as passive small-cap management of international equities for U.S. institutions. "DAM's small-company products round out Alliance's overall index product line by serving as complementary investments to clients with large-cap international/global passive investments," said Dave Williams, Alliance chairman.

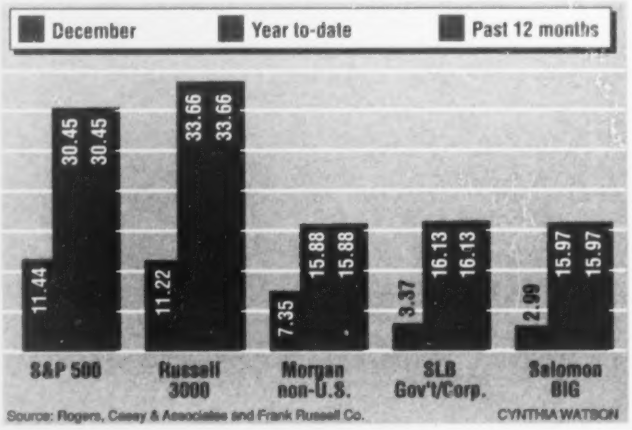
Ms. Zipkin said no U.S. clients have signed on as yet but noted the passive small-cap international offering at Alliance has only recently become available, and noted passive small-cap products are expected to perform well in coming months.

DAM was acquired from former parent Dimensional Fund Advisors Inc., Santa Monica, Calif., and managed about $335 million.

— Fred Williams

Pensions & Investments' indexes

The P&I monthly indexes track changes in the Standard & Poor's 500 Stock Index, Frank Russell Co.'s Russell 3000 Stock Index, the J.P. Morgan non-U.S. Government Bond Index, the Shearson Lehman Brothers Government/Corporate Bond Index and the Salomon Brothers Broad Investment Grade Bond Index.



Source: Rogers, Casey & Associates and Frank Russell Co. CYNTHIA WATSON

CREDIT RATINGS

D&P expects '92 to be good year

■ Improvements in credit ratings ought to continue this year after an improving trend in 1991, especially in the fourth quarter, according to Duff & Phelps Credit Rating Co., Chicago.

After successive years of credit downgrades vastly outnumbering upgrades, Paul J. McCarthy, the rating firm's president, expects more equality in corporate and other debt ratings. Assuming no worsening economic decline, he said investors can look forward to rating improvements because of, among other factors, continued deleveraging and a lower interest rate environment.

Also, many firms downgraded during the 1980s will be able to successfully implement corrective plans or benefit from continuing industry consolidation.

In 1991, upgrades improved from the previous year, marked by a positive fourth quarter. Downgrades outnumbered upgrades by 111 to 83, meaning a lowering of 57% of the ratings.

In 1990, downgrades outnumbered upgrades by 169 to 39, and downgrades accounted for 82% of all rating changes.

"Although this (fourth quarter tally) appears optimistic, it primarily reflects corrective actions being taken on the part of previously highly leveraged companies," said Mr. McCarthy.

— Barry B. Burr

COMPENSATION

Investors want share of reward

■ Institutional investors aren't concerned about the fat paychecks some top executives receive, as long as shareholders are making money too, according to Georgeson & Co. Inc., New York.

Georgeson, an investor relations firm, found 61% of the institutions surveyed oppose limiting executives pay to a specific dollar amount. Only 24% endorsed establishing pay ceilings based on a multiple of average employee salary, as is done in Japan, while 50% were opposed to the idea.

Still, 70% of those surveyed want compensation limits based on return to shareholders measured by dividends and share value, 67% favor limits on salaries based on annual profits and 80% want to reduce the top executives' salaries if corporate profits drop.

Of those surveyed, 58% oppose direct voting by shareholders on compensation levels for senior executives, while 66% approve of the use of independent compensation committees.

The survey polled 56 of the largest U.S. institutional investors that own stock in medium- to large-capitalization companies.

— Anne Schwimmer

Investors want pay-performance link

(% of institutions that responded)

Corporate policies	Strongly favor	Favor	Neutral	Disfavor	Strongly disfavor
1. Direct voting by shareholders on compensation of most highly paid officers	12.7%	16.4%	12.7%	40.0%	18.2%
2. Establishment of a ceiling on executive compensation					
a) Fixed dollar limitation	5.6	11.1	22.2	[illegible]	[illegible]
b) Limitation based upon multiple of average employee's salary	3.7	20.4	25.9	27.8	22.2
c) Limitation based upon annual profits	16.4	50.9	10.9	7.3	14.5
d) Limitation based upon return to shareholders through dividends and share value	28.6	41.1	14.3	5.4	10.7
3. Reduction of overall compensation if the company's performance worsens	41.8	38.2	10.9	5.5	3.6

Source: Georgeson & Co. Inc., New York CYNTHIA WATSON

REAL ESTATE

Retail returns negative for quarter

■ Retail properties in the Russell-NCREIF Property Index scored their first negative total return in the history of the index, while apartments continued to lead all other property types in third-quarter performance.

For the quarter ended Sept. 30, retail properties, which include a substantial amount of regional malls, scored a total return of −0.02%.

The negative return for retail properties is particularly bad news for pension and other tax-exempt investors, who have been depending on retail properties to offset the continuing poor performance of office properties.

The retail property figures don't include the 1991 holiday buying season, which unofficially began the day after Thanksgiving. But retailers have been reporting generally flat holiday sales.

For the third quarter, retail properties fell sharply in value, down 1.51%. The income return almost offset the decline in appreciation scoring a positive 1.49%.

Despite the current downturn, retail properties have outperformed all other property types with a 7.2% total return over three years. The composite index total return for three years is 2.7%.

Apartment properties had a positive return of 0.5% for the third quarter, composed of a 1.7% income return and −1.2% appreciation return.

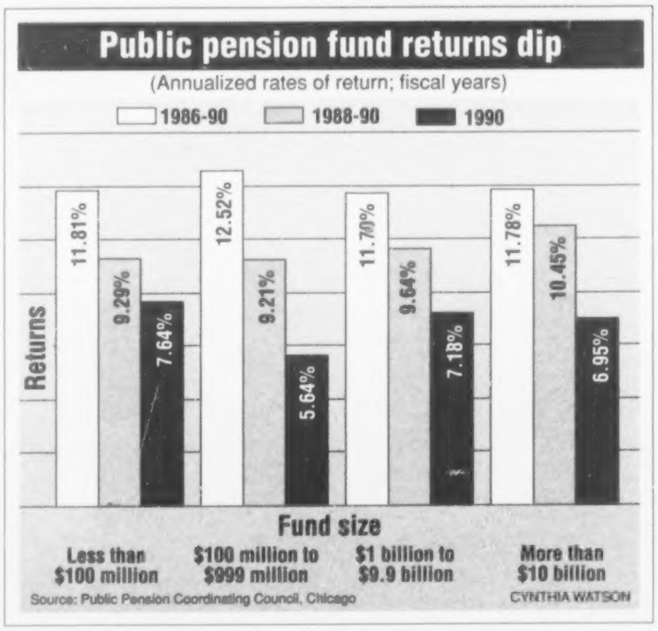
The three-year total return for apartments is also good at 5%.

The Russell-NCREIF index measures the performance of $22.62 billion in real estate held by tax-exempt investors.

— Steve Hemmerick

DATA BASES

Group compiles detailed data on public funds



Source: Public Pension Coordinating Council, Chicago

CYNTHIA WATSON

■ The average public pension fund is 85% funded, on the basis of its projected benefit obligation, information from a new data base shows.

The data base — PENDAT — was developed by the Public Pension Coordinating Council, a coalition of several organizations.

PENDAT provides detailed information on the structure, funding and investments of 202 retirement systems with $615 billion, or about 76% of total assets held by state and local retirement plans.

Subscribers can look up data, such as asset mix, pension liabilities and money managers for individual systems, as well as judicial and legislative developments. Over time, the PENDAT data base will be able to provide analysis of trends affecting public plans, including size of contributions, changes in actuarial assumptions and shifts in asset allocations.

The council is a 2-year-old group composed of the Government Finance Officers Association, the National Association of State Retirement Administrators, the National Conference on Public Employee Retirement Systems and the National Council on Teacher Retirement.

A survey from the data base is available from the GFOA, 180 N. Michigan Ave., Suite 800, Chicago, Ill. 60601, (312) 977-9700.

— Joel Chernoff

REAL ESTATE

Realty stocks up 20% for the year

■ The Wilshire Real Estate Securities Index posted a positive total return of 20% for 1991.

The index measures the performance of equity securities whose primary business is equity ownership of commercial real estate. The index is composed of 79% real estate investments trusts and 21% real estate operating companies.

The 1991 performance figure for the index stands in stark contrast to the 1990 total return of −33.5%.

"The good news is that the market, looking forward, has gotten beyond some of the pain that is out there," said Michael Torres, a vice president with the pension consulting firm Wilshire Associates, Santa Monica, Calif.

"The gain (for 1991) is a direct response to the Federal Reserve cut in the discount rate, which is making cash alternatives look attractive. Current income producing real estate will be in demand.

The 1991 return from the real estate securities index likely will far surpass the 1991 total return pension funds will receive from their pooled equity real estate investments.

Returns for pooled real estate funds for pension funds are expected to be slightly negative for 1991 in the Russell-NCREIF Property Index, according to Joseph Diehl, executive director of the National Council of Real Estate Investment Fiduciaries.

NCREIF, a non-profit association represents the institutional real estate industry, particularly pension funds.

— Steve Hemmerick

PEOPLE

Bessemer adds to London staff

■ John Trott has joined the London office of Bessemer Trust Co. as executive vice president responsible for the firm's international investments.

Mr. Trott, who was chairman and chief investment officer of Kleinwort Benson International Investment Management Ltd. in London, replaces Peter Pejacsevich who became chief investment officer of John Govett & Co. Ltd., London.

Bessemer has $9 billion under management, of which $800 million is in international investments.

According to Robert Elliott, senior executive vice president in New York, one reason Mr. Trott was chosen was "because we thought he would be compatible with our investment style."

— Margaret Price

INVESTING

Brokers, toys top performers

■ Investors who favored brokerage firms and toyed around with the stock market prospered in 1991, as brokerage and toy company stocks were the best performers for the year.

According to figures calculated by Bhirud Associates, New York, brokerage firm stocks gained 144.8% for the year. Toy company stocks were up 131.3%, followed by shoe company stocks, 104.7%.

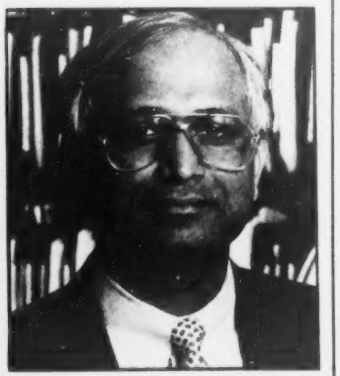
Suresh Bhirud, president of the research firm, said the brokerage stocks prospered because the brokerage industry had a good year. Toy companies prospered as people turned their attention from luxury and consumer durables toward a simpler, family-oriented lifestyle.

"Toys become almost a necessity if you have kids," he said.

Mr. Bhirud could not explain the strong showing of shoe company stocks.

Other top 10 industries, and their share price gains, were: housewares, 87.8%; home building, 85.2%; after-market auto parts, 78.9%; general merchandising retail stores, 73.4%; major regional banks, 71.9%; electronic instrumentation, 71.7%; and paper containers, 71%.

— Michael J. Clowes



Suresh Bhirud

MONEY MANAGERS

UAM lands first international firm

■ United Asset Management Corp. acquired Acadian Asset Management Inc. for an undisclosed price in a stock-and-cash transaction between the two Boston firms.

UAM now owns 26 money management firms; Acadian is its first international manager.

Gary L. Bergstrom, Acadian's president and chief investment officer, said there are a number of advantages to the firm's affiliation with UAM.

For example. the firm now can offer stock options to all of its 22 employees. Before, four or five of the firm's top executives had an ownership position. "After the affiliation, everyone will have some equity stake," he said.

In addition, he said the affiliation will help defray the cost of operating an international investment firm. "There are a number of economies of scale where UAM can offer some benefits," such as in obtaining errors and omissions insurance, Mr. Bergstrom said.

For its part, UAM is getting one of the hotter international equity managers. In *Pensions & Investments*' 1991 Scoreboard survey, Acadian pulled in $680 million in net new international/global business during the year ended Dec. 1, 1990, ranking fourth among firms with between $1 billion and $10 billion under management. For the year ended Dec. 1, 1991, Acadian pulled in an additional $205 million in net new international/global business.

Acadian has about $1.6 billion in discretionary assets under management for tax-exempt clients. UAM's group of 26 firms manage more than $55 billion for 4,500 clients.

— Chuck Paustian

PUBLIC FUNDS

System tries to dig out of quagmire

■ The Kansas Public Employees Retirement System hired a new consultant as it moves forward from its private placement problems.

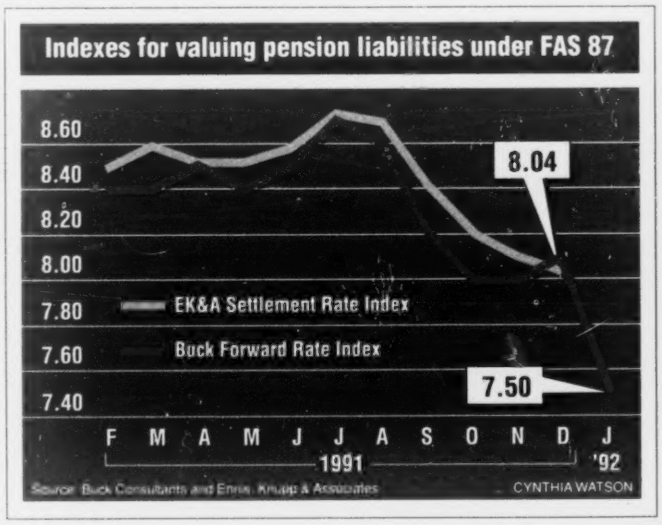
At its Jan. 13 meeting, the board hired the Dallas office of William M. Mercer Asset Planning Inc. as its consultant, replacing Callan Associates Inc. The board dropped Callan last summer after blaming it for not alerting the system to the danger of the private investment program. The mostly in-state investments are believed to have caused the system about $200 million in losses.

Callan is not among the 22 defendants the retirement system named Dec. 23 in an expanded lawsuit seeking $65 million (plus interest and other costs) from those whom it considers legally liable. The defendants are alleged to have committed fraud, misrepresentation, negligence and/or breach of contract or fiduciary duties in connection with the investment losses.

"I feel like this is a major step for us," Board Chairman Walt Cobler said.

Defendants in the amended petition are Reimer and Koger Associates Inc. and five individuals from the firm, including Ken Koger, Ron Reimer and Brent Messick; 12 individuals from the failed Home Savings and Loan Association, including former Home Savings Director and retirement system Board Chairman Michael Russell; Gage & Tucker, a law firm retained by Reimer & Koger to represent the system's transactions; and Peat, Marwick, Mitchell & Co., an accounting firm, and PMM partner Robert Spence.

— Curtis Vosti



Source: Buck Consultants and Ennis, Knupp & Associates

CYNTHIA WATSON

INTERNATIONAL

Japanese equities don't fit pattern

■ Consultant Columbine Capital Services Inc. has proof that Japanese stocks behave differently from those of most other major markets.

Columbine's data going back to 1984 showed that in most of the leading markets — such as the United States, Canada, France, Germany and the United Kingdom — stocks that outperform over a given period should be expected to continue to do so.

But this momentum theory doesn't work in Japan. On the contrary, "price momentum works almost backward in Japan," said David Ament, a principal of the Colorado Springs-based Columbine.

There, "stocks that go up a lot tend to go down in the future" and vice versa, the firm found.

The firm is using its historical data to create models that rank stocks in major non-U.S. countries according to how much their returns are expected to exceed that market's average — typically over about the next six months. (Columbine has offered this service on U.S. stocks since 1978).

Money managers would use this information, in combination with other quantitative devices, to aid stock picking within individual countries, Mr. Ament explained.

— Margaret Price

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International assets see healthy increase

By Margaret Price

International investments by the Top 200 U.S. pension funds galloped ahead in the year ended Sept. 30, spurred by strong markets and continuing new and expanded outlays.

Overall, funds' total foreign investments during the period — unadjusted for market gains — vaulted 49.2% to $68.21 billion by defined benefit plans and 35% to $7.38 billion by defined contribution plans. Those figures dwarf the respective 16% and 2.7% gains in the prior 12 months.

Many of the largest newcomers to international investing were public funds, such as the New York State Teachers' Retirement System and the New Jersey Division of Investment. Investing $311 million and $750 million respectively, they were among the 16 funds in the Top 200 that joined the growing bandwagon that now invests abroad.

Some funds, such as those of the Aluminum Company of America and the World Bank, posted sharp rises in their international allocations. According to *Pensions & Investments'* data, for the 12-month period, total foreign investments by ALCOA's fund jumped 102% to $234 million, and the World Bank's rocketed almost 125% to $1.745 billion. Although she didn't elaborate, Kelda Caldwell, chief-investment control unit at the World Bank, cited "a change in investment policy in evaluating liabilities."

Favorable foreign markets contributed significantly to the higher foreign holdings. For the year ended Sept. 30, the Morgan Stanley Capital International Europe Australia Far East Index climbed 22.3%, and the Salomon Brothers World Government Bond Index rose 15.1%.

Dollar outlays for foreign investments were lower for the year ended Sept. 30 than in the previous 12 months, *P&I's* data show.

Actual foreign stock investments by defined benefit funds leaped 50.1% to almost $52.2 billion. But on a market-adjusted basis, these holdings grew only 28%, compared with a 46% market-adjusted gain in the previous 12 months.

Actual foreign stock holdings by defined contribution plans grew 35.6% to $6.8 billion. Adjusted for market appreciation, the gain was 13.3%, compared with 34% the prior year.

For the most recent period, foreign bond holdings by defined benefit plans soared 51.4% to $15.3 billion. Adjusted for market appreciation, however, those investments advanced 36.7%. During the year-earlier period,

See **Overseas** *on page 76*

Number of Top 200 funds using various strategies

	Defined benefit	Defined contribution
Equity index funds	122	58
Bond index funds	52	10
GICs/BICs	31	75
Dedicated/immunized bonds	28	4
Foreign equities	108	18
Foreign fixed income	49	7
Foreign other	8	3
Real estate equity	120	11
Mortgages	55	3
Mortgage-backed securities	67	15
Non-investment grade bonds	25	na
Venture capital	74	3
Oil & gas	20	1
LBOs	29	2
Private placements	45	2

Profile statistics at a glance
($ billions)

	1991	1990
Top 1,000 assets*	2,188.0	1,878.1
Defined benefit	1,688.2	1,467.2
Defined contribution	474.1	392.0
Top 200 assets*	1,669.6	1,415.6
Top 100 assets	1,394.9	1,182.5
Top 50 assets	1,093.5	924.8
Top 25 assets	802.4	678.6
Top 200 defined benefit*	1,316.4	1,124.4
Top 200 defined contribution*	331.9	272.6
Top 200 profit sharing	11.9	11.1
Top 200 401(k)	78.3	50.2**
Top 200 thrift	50.6	**
Top 200 defined benefit		
Internal management*	549.0	490.3
Equities	189.3	157.6
Fixed income	265.1	232.8
Short-term	29.7	36.9
Real estate equity	15.7	20.8
Mortgages	14.7	na
Other	24.6	36.0***
Equity index funds	200.0	137.4
Internally managed	85.0	64.5
Bond index funds	77.0	66.3
internally managed	32.6	25.5
Real estate equity	50.6	50.1
Mortgages	21.6	23.9
Mortgage-backed securities	67.0	60.4
GICs/BICs	7.2	4.9
International	68.2	45.7
Equity	52.2	34.7
Fixed income	15.3	10.1
Other	0.7	0.9
Venture capital	5.9	5.0
Dedicated/immunized bonds	34.9	26.6
Oil & gas	0.8	0.9
LBOs	6.9	5.7
Private placements	10.7	10.5
Non-investment grade bonds	2.5	2.7
Contributions paid	29.6	31.1
Benefits paid	49.9	44.0
Top 200 defined contribution		
Internal management*	161.2	128.5
Equities	55.1	42.0
Fixed income	45.0	56.3
Short-term	19.0	15.8
Real estate equity	5.4	4.6
Mortgages	20.9	na
Other	12.6	6.8
Equity index funds	39.6	27.5
Internally managed	28.6	22.2
Bond index funds	0.6	0.7
Internally managed	0.2	0.0
Real estate equity	5.7	5.0
Mortgages	20.9	19.5
Mortgage-backed securities	6.6	5.4
GICs/BICs	43.5	34.7
International	7.4	5.4
Equity	6.8	5.0
Fixed income	0.6	0.4
Other	****	****
Venture capital	****	****
Dedicated/immunized bonds	0.3	0.2
Oil & gas	****	****
LBOs	0.8	0.8
Private placements	12.1	11.2
Contributions paid	9.0	9.1

*Total is greater because some funds did not provide a breakout
**In 1990, 401(k)/thrift assets were combined
***Includes mortgages
****Less than $100 million

Cost drives in-house changes

By Terry Williams

In a continuing effort to control investment costs, the $12.6 billion employee benefit funds of Pacific Telesis Group increased their percentage of internally managed funds to 15.6% from 12.3% of total assets, according to data from *Pensions & Investments'* survey of the Top 200 pension funds.

In 1990, the fund had $1.34 billion managed internally, the bulk of it in defined contribution assets. In 1991, the amount was $1.97 billion.

The fund manages in-house a quantitative equity portfolio, cash, foreign exchange and real estate.

"What we are doing is evolving to a more internal focus on the assets," said E. Douglas Taylor, executive director-investment management.

"We will continue to have it because we can do it cost effectively. It helps us to be sophisticated."

Mr. Taylor declined to say what target the fund had for internal management, but did say there always will be external managers so the in-house staff keeps its "fingers on the pulse" of the investment industry and as a safety valve.

Conversely, the $2.7 billion Arkansas Teacher Retirement System decreased the amount it managed internally from almost 13% of total assets in 1990 to about 1.6% in 1991.

Arkansas Teachers managed $283 million in 1990. That amount decreased to $43 million in 1991.

Bill A. Shirron, executive director, said the fund's motive was increased efficiency when it decided to no longer manage cash internally; the $43 million is entirely in what Mr. Shirron called "first mortgage loans."

Its master trustee, First Commercial Bank, is now managing the pension fund's cash, said Mr. Shirron.

"We just felt it was more efficient," said Mr. Shirron. "It took the burden off of us as far as getting bids and trades."

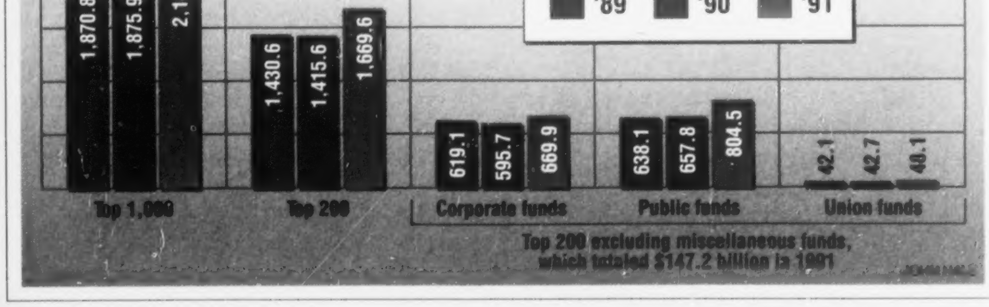
The $45 billion pension fund of American Telephone & Telegraph, Basking Ridge, N.J., realized an increase of about $400 million in internally managed alternative investments, according to the survey.

There was some appreciation of the assets and some additional funding, but there really hasn't

See **Internal** *on page 76*

Change in total assets

($ billions for years ended Sept. 30)



How sponsor data were compiled

The information on employee benefit funds contained in this special report was compiled in several steps.

Questionnaires were sent to 1,500 fund sponsors in *Pensions & Investments*' data base. The largest 1,000 were identified from the completed questionnaires, follow-up telephone calls and a cross-check with information supplied by Money Market Directories Inc., Charlottesville, Va., publisher of the **1992 Money Market Directory of Pension Funds and Their Investment Managers**.

The detailed information contained in the profiles of the Top 200 employee benefit funds was obtained from the completed questionnaires and from interviews with fund officials by the *P&I* editorial staff.

Where no information was available from the fund, figures were taken from the Money Market Directory.

Unless otherwise noted, the data reflect fund operations as of Sept. 30, 1991.

In cases where the fund supplied data considered too old, *P&I* estimated the asset growth based on one of the following methods: the most recent asset mix supplied by the fund; the asset mix reported in the 1992 Money Market Directory; or *P&I*'s reported average asset mix for that particular type of fund, i.e. union, corporate or public. In some cases, the estimates were based on asset totals reported in the sponsor's most recent annual report.

In the tables accompanying the profiles, dollar amounts are rounded to the nearest million.

The asset mixes for the Top 200 and next 800 funds represent the average of all reported allocations for the respective funds; the aggregate defined contribution asset mixes are based on the sponsor's largest plan only. The separate asset mixes for the components of the Top 200 and next 800 universes were compiled in the same way.

Indexing rises 32% on market muscle

By Curtis Vosti

Fueled by substantial market gains, new products and a valued niche in institutional portfolios, indexing by the nation's largest pension funds jumped 32% to $317.2 billion in the year ended Sept. 30.

Even accounting for strong market performance — the Standard & Poor's 500 Stock Index returned 31.2%, the Salomon Broad Investment Grade Bond Index returned 16%, the Morgan Stanley Capital International Europe Australia Far East Index returned 22.3% and the Salomon Brothers World Bond Index returned 18.3% — indexing among the Top 200 funds showed a gain of about 4%, *Pensions & Investments* data show.

Last year, the Top 200 pension funds reported indexing $231.9 billion, but that number was adjusted to $240.9 billion with the addition of $9 billion in equities indexed by the New York City Retirement Systems that had not been reported.

With the market returns, that index pool could be expected to have grown to $306 billion without the infusion of new assets.

Most of the pool's gain was from indexed stocks. Equity indexing rose a revised 37.8%, to $239.6 billion, and bond indexing rose 16%, to $77 billion in the year ended Sept. 30.

Indexing continues to be attractive when compared with active management because of its lower fees and benchmark performances, according to Gregg Buckalew, head of asset practice services in Atlanta for The Wyatt Co. "Indexing solves a lot of problems," he said. "It at least allows the plan sponsor to avoid criticism about comparison to a market performance because it is the benchmark."

Added to those attractions are continual growth in new or enhanced indexes and what Mr. Buckalew calls "a movement" of more pension funds constructing portfolios built around a core index fund.

One of those was the New York City Teachers' Retirement System, part of the $48.8 billion New York City Retirement Systems. The teachers' system indexed $3.7 billion in equities as a first step in diversifying into equities, according to William Paolino, chief of the bureau of asset management

See **Indexing** *on page 76*

Global initiatives fuel manager moves

New strategic ploys show up in rankings

By Anne Schwimmer

With pension funds turning a hungry eye to the fat returns being garnered in global investing, this year saw some changes in the rankings of international managers most frequently named by the nation's largest defined benefit pension plans.

Capital Guardian Trust Co., Los Angeles, kept its place in the No. 1 slot with 22 mentions, according to *Pensions & Investments*' survey of the largest 200 pension funds.

But J.P. Morgan Investment Management Inc., New York, moved up to tie for the No. 2 slot — at 17 mentions — with Baring International Investment Ltd., London. Morgan was in third place last year; Baring was tied for No. 2.

Brinson Partners Inc., Chicago, moved into the spotlight this year, tying for third with State Street Bank & Trust Co., Boston. State Street was tied for second place last year.

Change in strategies is the big reason for the move. "I think we see two trends going on which are a little paradoxical," said Robert Ronus, senior vice president-international at Capital Guardian.

"Initially when American institutions decided they wanted to invest some of their assets out of the U.S., most did it by setting up an EAFE (the Morgan Stanley Capital International Europe Australia Far East Index) or a world-less-the-U.S. portfolio," he said. "We're seeing more people now look at global portfolios. And at the other end of the spectrum, we're also seeing sponsors looking at more specific regional assignments."

In 1991 "you had some very small markets that did very well," while the Japanese market, which makes up about half of the EAFE index, returned just 9.1% in U.S. dollars, Mr. Ronus said. The EAFE index returned 12.5% in U.S. dollars.

The Hong Kong market was up 49.5%, the Australian market rose 35.6% and the Singapore/Malaysian market climbed 25% in U.S. dollars, he said.

In Latin America, booming stock markets created even more phenomenal returns: according to the MSCI Emerging Market Free Indices, the Mexican market returned 122.1%, Brazil's 168.6%, Chile's 105.6 and Argentina's a whopping 403.1%, all in U.S. dollars.

"The international search represents a significant portion of the searches that have gone on," said David Brigham, president and chief investment officer at J.P. Morgan. J.P. Morgan also retained its spot as the money manager most used overall by the nation's largest pension funds.

"It's really dramatic: The number of strategies and approaches to international investing has really multiplied in the last few years," he said. He also agreed with Mr. Ronus that fund sponsors are evincing increased interest both in global portfolios and selective international targets — by country or region, for example.

Both men also agreed that their international clients have grown more concerned with currency risk this year as U.S. interest rates have dropped and the dollar has devalued in tandem.

"There's been a lot of interest in currency management," Morgan's Mr. Brigham said. "We have always treated the currency decision as a separate investment exercise; we have sort of been known for that," he said. "Be-

See **Rankings** *on page 76*

Top 200 top consultants

	Times mentioned
Frank Russell	23
Callan	16
Wilshire	11
SEI	9
William Mercer	7

Top 200 top master trustee/custodians

	Times mentioned
Bankers Trust	32
Northern Trust	25
State Street Bank	23
Boston Safe	16
Mellon Bank	14

Top 200 top global custodians

	Times mentioned
State Street	20
Bankers Trust	18
Northern Trust	16
Chase	13
Boston Safe	10

Top managers overall

	Times mentioned
J.P. Morgan	89
Wells Fargo Nikko	66
Trust Co./West	61
Equitable	53
Capital Guardian	47
Mellon	44
Alliance	42
Prudential	41
Brinson Partners	37
Bankers Trust	36

Top domestic equity managers

	Times mentioned
Wells Fargo Nikko	32
Alliance Capital	27
Mellon	23
Capital Guardian	18
Bankers Trust	16
RCM	15
Rosenberg	15
INVESCO	13
Fayez Sarofim	13
Ariel	12

Top domestic bond managers

	Times mentioned
PIMCO	25
J.P. Morgan	24
Loomis Sayles	18
Mellon	13
Wells Fargo Nikko	13
Criterion	12
Fischer Francis	9
Lincoln Capital	9
TCW	9
Putnam	8

Top 200 top international managers*

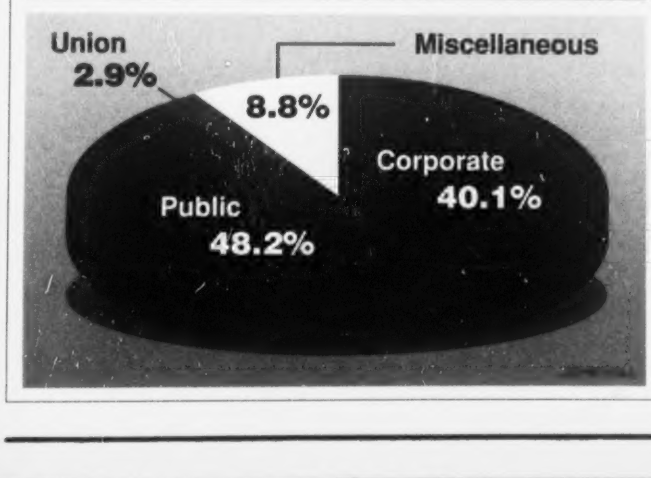
	Times mentioned
Capital Guardian	22
Baring International	17
J.P. Morgan	17
Brinson	14
State Street Bank	14
Nomura	12
Schroder	12
Wells Fargo Nikko	12
Morgan Grenfell	11
Acadian Asset	9

*Includes equity, fixed-income, cash and other international investments

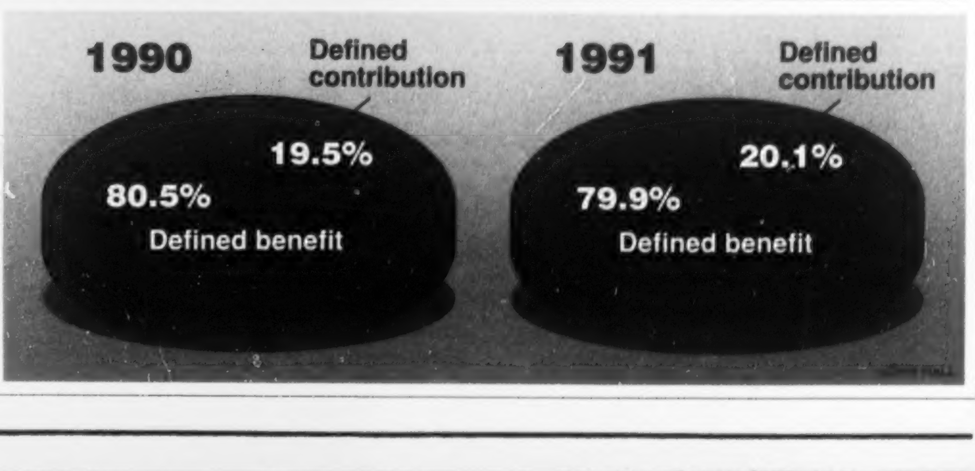
Top 200 top real estate managers

	Times mentioned
Equitable	31
JMB	29
Prudential	27
Aetna	24
Trust Co./West	21
RREEF	20
LaSalle	18
Aldrich, Eastman & Waltch	16
Heitman	15
Sentinel	14

Where the Top 200 assets are



Top 200 assets: defined benefit vs. defined contribution



Top 200 pension funds/sponsors

Assets in $ millions

1.	TIAA-CREF	99,600
2.	California Public Employees	64,658
3.	New York State & Local	50,081
4.	New York City	48,876
5.	AT&T	45,028
6.	General Motors	40,800
7.	California State Teachers	37,367
8.	New York State Teachers	32,514
9.	State of New Jersey	31,280
10.	General Electric	31,078
11.	Texas Teachers	29,477
12.	IBM	29,000
13.	Florida State Board	25,517
14.	Ohio Public Employees	24,272
15.	State of Wisconsin	22,790
16.	Ford Motor	22,700
17.	E.I. du Pont	20,501
18.	North Carolina Retirement	20,261
19.	Ohio State Teachers	20,200
20.	State of Michigan	20,120
21.	Pennsylvania Public Schools	19,300
22.	University of California	16,988
23.	NYNEX	16,740
24.	Washington State Board	15,640
25.	AMERITECH	15,600
26.	Minnesota State Board	15,105
27.	GTE	14,976
28.	Bell Atlantic	14,741
29.	BellSouth	14,570
30.	Boeing	14,010
31.	Virginia Retirement System	13,300
32.	Maryland State Retirement	13,200
33.	Pacific Telesis	12,594
34.	Oregon Public Employes	12,536
35.	Georgia Teachers	12,354
36.	Teamsters, Central States	11,163
37.	Pennsylvania State Employes	11,131
38.	Los Angeles County Employees	11,091
39.	Colorado Public Employees	10,914
40.	Teamsters, Western Conference	10,825
41.	Federal Retirement Thrift	10,198
42.	Rockwell International	10,125
43.	Tennessee Consolidated	10,077
44.	Eastman Kodak	9,961
45.	Alabama Retirement Systems	9,920
46.	Illinois Teachers	9,888
47.	USX	9,850
48.	United Nations	9,798
49.	South Carolina Retirement	9,386
50.	U S WEST	9,370
51.	Connecticut Trust Funds	9,360
52.	United Technologies	9,212
53.	Southwestern Bell	9,093
54.	Lockheed	9,052
55.	Exxon	8,919
56.	Arizona State Retirement	8,850
57.	Shell Oil	8,783
58.	Philip Morris	8,698
59.	Sears, Roebuck	8,665
60.	Chevron	8,377
61.	Hughes Aircraft	7,900
62.	Texas Employees	7,683
63.	General Dynamics	7,234
64.	Procter & Gamble	7,105
65.	Allied-Signal	7,000
66.	McDonnell Douglas	6,800
67.	Prudential Insurance	6,764
68.	Westinghouse Electric	6,667
69.	Massachusetts Teachers/Employees	6,591
70.	Iowa Public Employees	5,942
71.	Missouri Public School	5,861
72.	Chrysler	5,834
73.	Pacific Gas & Electric	5,600
74.	UMWA	5,562
75.	Mobil Oil	5,426
76.	Mississippi Public Employees	5,420
77.	Illinois Municipal	5,318
78.	Delta Air Lines	5,139
79.	Unisys	4,998
80.	Utah State	4,900
81.	Amoco	4,825
82.	Alaska Retirement Systems	4,800
83.	United Airlines	4,800
84.	American Airlines	4,750
85.	Caterpillar	4,600
86.	Dow Chemical	4,594
87.	San Francisco City & County	4,586
88.	Hawaii Employees	4,520
89.	Kentucky Teachers	4,501
90.	Monsanto	4,500
91.	United Methodist Church	4,333
92.	National Electrical Contractors	4,308
93.	Louisiana Teachers	4,292
94.	Los Angeles Fire & Police	4,220
95.	Illinois State Universities	4,210
96.	Kansas Public Employees	4,207
97.	Nevada Public Employees	4,169
98.	Northrop	4,169
99.	Georgia Employees	4,150
100.	Minnesota Mining & Mfg.	4,102
101.	State Farm Insurance	4,080
102.	J.C. Penney	4,056
103.	Atlantic Richfield	4,028
104.	Detroit Retirement Systems	4,010
105.	Chicago Public Schools	4,000
106.	Southern Co.	3,982
107.	World Bank	3,950
108.	Kentucky Retirement Systems	3,900
109.	Metropolitan Life	3,857
110.	Consolidated Edison	3,850
111.	Textron	3,846
112.	Indiana Public Employees	3,802
113.	Xerox	3,780
114.	RJR Nabisco	3,737
115.	Ohio Police & Firemen	3,717
116.	International Paper	3,713
117.	Aluminum Co. of America	3,679
118.	Grumman	3,650
119.	Martin Marietta	3,644
120.	Raytheon	3,633
121.	Illinois State Board	3,503
122.	Tennessee Valley Authority	3,483
123.	Texaco	3,400
124.	Ohio School Employees	3,371
125.	Bethlehem Steel	3,325
126.	Tenneco	3,314
127.	TRW	3,313
128.	Eli Lilly	3,207
129.	Massachusetts PRIM	3,200
130.	Union Carbide	3,174
131.	Southern Baptist Convention	3,149
132.	Aetna Life	3,107
133.	Los Angeles City Employees	3,095
134.	Deere	3,069
135.	Honeywell	2,855
136.	Boilermakers-Blacksmiths	2,834
137.	Southern California Edison	2,820
138.	Rhode Island Employees	2,788
139.	Kaiser Permanente	2,775
140.	ITT	2,769
141.	Arkansas Teacher Retirement	2,726
142.	Texas Municipal Retirement	2,710
143.	Presbyterian Church (USA)	2,700
144.	Abbott Labs	2,681
145.	Halliburton	2,667
146.	Louisiana State Employees	2,663
147.	Phillips Petroleum	2,661
148.	Owens-Illinois	2,650
149.	USAir	2,636
150.	Operating Engineers, Central Fund	2,570
151.	Trans World Airlines	2,561
152.	United Parcel Service	2,534
153.	Texas County & District	2,509
154.	National Rural Electrical Co-op	2,497
155.	Motorola	2,492
156.	Bristol-Myers Squibb	2,479
157.	Citibank	2,477
158.	Bakery & Confectionery	2,468
159.	New Mexico Educational	2,426
160.	BP America	2,400
161.	New Mexico Public Employees	2,386
162.	Commonwealth Edison	2,379
163.	PPG Industries	2,362
164.	Oklahoma Teachers	2,348
165.	Maine State Retirement	2,311
166.	Southern California UFCW	2,288
167.	American Stores	2,276
168.	Indiana State Teachers	2,275
169.	Hospital Healthcare Employees	2,249
170.	Travelers	2,237
171.	CIGNA	2,236
172.	FPL Group	2,227
173.	Evangelical Lutheran Church	2,223
174.	Chicago Municipal Employees	2,220
175.	Los Angeles Water & Power	2,165
176.	ICMA Retirement	2,160
177.	Navistar	2,159
178.	American Electric Power	2,124
179.	K mart	2,109
180.	Inland Steel	2,076
181.	NCR	2,032
182.	Montana Board	2,024
183.	Anheuser-Busch	2,023
184.	Digital Equipment	2,018
185.	S. New England Telephone	2,003
186.	Cooper Industries	1,975
187.	BankAmerica	1,971
188.	United Telecommunications	1,969
189.	Church Pension Fund (Episcopal)	1,963
190.	Johnson & Johnson	1,962
191.	Oklahoma Public Employees	1,961
192.	Bechtel Power	1,929
193.	Hewlett Packard	1,925
194.	Idaho Public Employee	1,916
195.	I.A.M. National	1,905
196.	Missouri State Employees	1,905
197.	New York Life	1,890
198.	Plumbers National Headquarters	1,881
199.	GenCorp	1,866
200.	Georgia-Pacific	1,856
	Total	**1,669,616**

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
201.	Equitable Life	New York	1,855
202.	District of Columbia	Washington	1,850
203.	Chicago Police	Chicago	1,841
204.	Cook County Emp.	Chicago	1,838
205.	LTV	Dallas	1,837
206.	Milwaukee City	Milwaukee	1,834
207.	Pfizer	New York	1,830
208.	Delaware State	Dover, Del.	1,828
209.	Hercules	Wilmington, Del.	1,811
210.	Baltimore City	Baltimore	1,800
211.	Northwest Airlines	St. Paul, Minn.	1,790
212.	Philadelphia Electric	Philadelphia	1,782
213.	Wyoming	Cheyenne, Wyo.	1,772
214.	Cons. Natural Gas	Pittsburgh	1,728
215.	Philadelphia Municipal	Philadelphia	1,722
216.	Texas Utilities	Dallas	1,722
217.	Hallmark Cards	Kansas City, Mo.	1,718
218.	John Hancock	Boston	1,716
219.	Carpenters/N. Cal.	Oakland, Calif.	1,713
220.	Orange County	Santa Ana, Calif.	1,712
221.	West Virginia	Charleston	1,701
222.	Teledyne	Los Angeles	1,700
223.	Upjohn	Kalamazoo, Mich.	1,696
224.	Arizona Public Safety	Phoenix	1,695
225.	New Hampshire	Concord, N.H.	1,662
226.	Army & AF Exchange	Dallas	1,653
227.	North American Philips	New York	1,649
228.	American Cynamid	Wayne, N.J.	1,632
229.	Goodyear	Akron, Ohio	1,630
230.	Arkansas PERS	Little Rock, Ark.	1,626
231.	Milwaukee Employees	Milwaukee	1,621
232.	Eaton	Cleveland	1,620
233.	Texas Instruments	Dallas	1,614
234.	Sun Co.	Radnor, Pa.	1,610
235.	Ralston Purina	St. Louis	1,607
236.	Sheet Metal Workers	Alexandria, Va.	1,600
237.	Teamsters/New England	Boston	1,600
238.	Pan American Airways	New York	1,578
239.	NADA-Auto Dealers	McLean, Va.	1,576
240.	South Dakota	Pierre, S.D.	1,559
241.	Litton Industries	Beverly Hills	1,550
242.	ARMCO	Parsippany, N.J.	1,546
243.	James River	Richmond, Va.	1,520
244.	Colgate-Palmolive	New York	1,500
245.	Michigan Municipal	Lansing, Mich.	1,500
246.	Champion International	Stamford, Conn.	1,496
247.	Financial Inst. Retirem't	White Plns., N.Y.	1,491
248.	Corning	Corning, N.Y.	1,486
249.	Merck	Rahway, N.J.	1,483
250.	Dun & Bradstreet	New York	1,482
251.	SmithKline Beecham	Philadelphia	1,479
252.	Pacific Enterprises	Los Angeles	1,477
253.	Federal Express	Memphis	1,471
254.	Pepsico	Purchase, N.Y.	1,470
255.	Bayer USA	Pittsburgh	1,455
256.	Sandia Nat'l Labs	Albuquerque	1,455
257.	Marine Egrs./MEBA	Washington	1,451
258.	Elec. Industry Joint Bd.	Flushing, N.Y.	1,450
259.	Kimberly-Clark	Dallas	1,450
260.	Op. Egrs. Local 12/Cal.	Pasadena, Calif.	1,447
261.	Warner-Lambert	Morris Plns., N.J.	1,440
262.	Occidental Petroleum	Los Angeles	1,437
263.	Mass. Inst. of Tech.	C'bridge, Mass.	1,426
264.	Retail Clerks/N. Calif.	Walnut Creek	1,424
265.	Public Service E&G	Newark, N.J.	1,417
266.	Nebraska State	Lincoln, Neb.	1,413
267.	Unilever U.S.	New York	1,410
268.	YMCA	New York	1,405
269.	Op. Egrs. Local 3	San Francisco	1,404
270.	IMF	Washington	1,400
271.	General Mills	Minneapolis	1,396
272.	Time Warner	New York	1,392
273.	San Diego County	San Diego	1,387
274.	Coca-Cola	Atlanta	1,370
275.	Rohm & Haas	Philadelphia	1,360
276.	Federated Dept. Stores	Cincinnati	1,355
277.	Emerson Electric	St. Louis	1,351
278.	Westvaco	New York	1,350
279.	Unocal	Los Angeles	1,347
280.	General Public Utilities	Parsippany, N.J.	1,346
281.	Times Mirror	New York	1,338
282.	American Brands	Old G'ch, Conn.	1,322
283.	Union Pacific	Bethlehem, Pa.	1,314
284.	Reynolds Metals	Richmond, Va.	1,300
285.	Armstrong World Ind.	Lancaster, Pa.	1,299
286.	General Public Utilities	Reading, Pa.	1,299
287.	Carpenters/N.Y. City	New York	1,298
288.	Olin	Stamford, Conn.	1,288
289.	BASF	Parsippany, N.J.	1,284
290.	Scott Paper	Philadelphia	1,270
291.	Niagara Mohawk Power	Syracuse, N.Y.	1,262
292.	CIBA-GEIGY	Ardsley, N.Y.	1,259
293.	N.J. Public Service E&G	Newark, N.J.	1,249
294.	Boise Cascade	Boise, Idaho	1,248
295.	Manufacturers Hanover	New York	1,240
296.	Dana	Toledo, Ohio	1,225
297.	Detroit Edison	Detroit	1,222
298.	Quaker Oats	Chicago	1,222
299.	Michigan Civil Service	Lansing, Mich.	1,214
300.	McDermott Int'l	New Orleans	1,213
301.	FMC	Chicago	1,211
302.	Hoechst Celanese	Somerville, N.J.	1,200
303.	Hanson Industries	Iselin, N.J.	1,190
304.	Laborers Nat'l Pension	Dallas	1,181
305.	American Nat'l Can	Chicago	1,180
306.	Asea Brown Boveri	Stamford, Conn.	1,175
307.	Hoffman-La Roche	Nutley, N.J.	1,175
308.	Fluor	Irvine, Calif.	1,174
309.	Saudi Aramco	Houston	1,173
310.	May Dept. Stores	St. Louis	1,160
311.	Weyerhaeuser	Tacoma, Wash.	1,160
312.	Northern States Power	Minneapolis	1,154
313.	Baxter Int'l	Deerfield, Ill.	1,150
314.	Deseret Mutual	Salt Lake City	1,148
315.	Coastal	Houston	1,145
316.	Liberty Mutual	Dover, Del.	1,143
317.	Whirlpool	Bent. Har., Mich.	1,141
318.	Motion Picture Industry	Studio City	1,128
319.	Bellcore	Livingston, N.J.	1,112
320.	W.R. Grace	Boca Raton, Fla.	1,107
321.	San Jose City	San Jose, Calif.	1,100
322.	Sacramento County	Sac'mento, Calif.	1,093
323.	Ingersoll-Rand	W'dclf. Lake, N.J.	1,089
324.	Norfolk Southern	Norfolk, Va.	1,086
325.	United Church of Christ	New York	1,082
326.	Sara Lee	Chicago	1,080
327.	Marsh & McLennan	New York	1,077
328.	Entergy	New Orleans	1,074
329.	Columbia Gas System	Wilmington, Del.	1,070
330.	Crown Cork & Seal	Philadelphia	1,067
331.	Cummins Engine	Columbus, Ohio	1,066
332.	Central & South West	Dallas	1,064
333.	Continental Can	Omaha, Neb.	1,061
334.	Polaroid	C'bridge, Mass.	1,051
335.	Chi. Transit Authority	Chicago	1,047
336.	Harris	Melbourne, Fla.	1,046
337.	American Red Cross	Alexandria, Va.	1,045
338.	Nat'l Auto. Sprinkler 669	Landover, Md.	1,042
339.	Northeast Utilities	Hartford, Conn.	1,041
340.	Conrail	Philadelphia	1,040
341.	San Bernardino County	San Ber., Calif.	1,033
342.	Alameda County	Oakland, Calif.	1,032
343.	Arthur Anderson	Chicago	1,031
344.	Brown & Williamson	Louisville, Ky.	1,031
345.	Kellogg	Bat. Crk., Mich.	1,025
346.	Montgomery Ward	Chicago	1,025
347.	San Diego City	San Diego	1,020
348.	Fairfax County	Fairfax, Va.	1,015
349.	Op. Egrs. Nos. 302/612	Seattle	1,014
350.	Cincinnati City	Cincinnati	1,013
351.	Lutherans-Mo. Synod	St. Louis	1,012
352.	Gillette	Boston	1,008
353.	Schlumberger	New York	1,008
354.	R.R. Donnelley	Chicago	1,007
355.	CSX	Richomnd, Va.	1,003
356.	Carpenters/S. Calif.	Los Angeles	1,000
357.	CBS	New York	997
358.	Ernst & Young	Cleveland	995
359.	Ashland Oil	Ashland, Ky.	991
360.	Mead	Dayton, Ohio	985
361.	Boston City	Boston	983
362.	Ohio PERS Def. Comp.	Columbus, Ohio	975
363.	Nestle USA	Solon, Ohio	970
364.	ConAgra	Omaha, Neb.	963
365.	Pennsylvania P&L	Allentown, Pa.	955
366.	Manville	Denver	950
367.	ICI Americas	Wilmington, Del.	948
368.	North Dakota State	Bismarck, N.D.	947
369.	Winn Dixie Stores	Jacksonville, Fla.	930
370.	EG&G	Wellesley, Mass.	923
371.	Mass. Bay Transit	Boston	923
372.	Denver Public Schools	Denver	921
373.	Campbell Soup	Camden, N.J.	918
374.	Parsons	Pasadena, Calif.	917
375.	Chase Manhattan	New York	915
376.	Duke Power	Charlotte, N.C.	915
377.	Centerior Energy	Indep., Ohio	908
378.	Teamsters, Central Pa.	Reading, Pa.	908
379.	Jacksonville City	Jacksonville, Fla.	905
380.	Pillsbury	Minneapolis	896
381.	Contra Costa County	Concord, Calif.	895
382.	Whitman	Roll'g M'dows, Ill.	895
383.	Baltimore County	Baltimore	894
384.	Jefferson Smurfit	St. Louis	893
385.	Blue Cross/Blue Shield	Chicago	891
386.	Nat'l Elevator Industry	Philadelphia	884
387.	Black & Decker	Towson, Md.	882
388.	Capital Cities/ABC	New York	880
389.	De Luxe	St. Paul, Minn.	880
390.	Cincinnati Bell	Cincinnati	878
391.	Dayton Hudson	Minneapolis	875
392.	Dallas Employees	Dallas	867
393.	Steelcase	Gr'd Rap., Mich.	866
394.	Safeway Stores	Oakland, Calif.	864
395.	Avis	Garden City, N.Y.	862
396.	HealthTrust	Nashville	855
397.	Greyhound Amal. Trusts	W. Des Moines	854
398.	Consumers Power	Jackson, Mich.	853
399.	American Home Pdcts.	New York	851
400.	Enron	Houston	850
401.	Greyhound Lines	Dallas	850
402.	Memphis City	Memphis	848
403.	Union Camp	Wayne, N.J.	843
404.	Minneapolis Employees	Minneapolis	840
405.	Op. Egrs./Midwest	Countryside, Ill.	833
406.	Panhandle Eastern	Houston	833
407.	Owens-C. Fiberglas	Toledo, Ohio	832
408.	Wayne County	Detroit	829
409.	N.Y. State Def. Comp.	Albany	823
410.	Milwaukee County	Milwaukee	821
411.	ILGWU/Garment Wkrs.	New York	820
412.	Montgomery County	Rockville, Md.	820
413.	Colorado Fire & Police	Englewood	819
414.	Schering-Plough	Madison, Wis.	819
415.	Tribune	Chicago	817
416.	Baltimore G&E	Baltimore	815
417.	Wal-Mart Stores	Bentonville, Ark.	810
418.	Ethyl	Richmond, Va.	808
419.	Borden	Columbus, Ohio	800
420.	Iron Wkrs./Calif.	San Marino	800
421.	Dominion Resources	Richmond, Va.	798
422.	MITRE	Bedford, Mass.	797
423.	Battelle Mem. Institute	Columbus, Ohio	796
424.	Coltec Industries	New York	796
425.	Teamsters/N.Y. State	Utica	788
426.	Kroger	Cincinnati	785
427.	Mars	McLean, Va.	782
428.	Alexander & Alexander	Owings Mills, Md.	780
429.	Louisiana Schools	Baton Rouge	778
430.	Screen Act./Prod. Guild	Burbank, Calif.	774
431.	Aerospace	El Segundo	767
432.	Houston Industries	Houston	761
433.	Nalco Chemical	Naperville, Ill.	761
434.	Service Empl.-32B/J	New York	756
435.	KPMG Peat Marwick	Montvale, N.J.	753
436.	Santa Fe Pacific	Chicago	751
437.	AFTRA	New York	750
438.	Burlington Res.	Seattle	750
439.	Peoples Energy	Chicago	749
440.	Laborers/So. Calif.	Suisun, Calif.	746
441.	Maritime Assoc./Pacific	San Francisco	746
442.	Carpenters/Ohio	Cleveland	745
443.	Quantum Chemical	New York	745
444.	Maytag	Newton, Iowa	743
445.	Food-Comm./Atlanta	Atlanta	740
446.	Gannett Co.	Arlington, Va.	740
447.	Navy Resale System	Staten Island	740
448.	Sundstrand	Rockford, Ill.	738
449.	Food-Comm. Int'l	Chicago	736
450.	Budd Co.	Troy, Mich.	734
451.	Missouri Local Govt.	Jefferson City	734
452.	Avery Dennison	Pasadena, Calif.	728
453.	Labor & Retire./Chi.	Chicago	724
454.	Northern Telecom	Nashville	724
455.	Control Data	Minneapolis	723
456.	Kaiser Alum. & Chem.	Oakland, Calif.	722
457.	Ventura County	Ventura, Calif.	722
458.	Carpenters/Chicago	Chicago	721
459.	E-Systems	Dallas	718
460.	Ohio Edison	Akron	716
461.	Laborers/Chicago	Forest Park, Ill.	715
462.	Marriott	Washington	711
463.	ARMCO Steel	Cincinnati	710
464.	Graphic Comm. No. 458	Chicago	707
465.	Amer. Fed. Musicians	New York	701
466.	General Signal	Stamford, Conn.	700
467.	Johnson Controls	Milwaukee	700
468.	New York State G&E	Ithaca	700
469.	New England Electric	W'bor'gh, Mass.	699
470.	Op. Engrs. Local 18	Cleveland	697

Source: *Pensions & Investments* and Money Market Directories Inc.

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
471.	Stone & Webster	New York	697
472.	Walgreen Co.	Deerfield, Ill.	697
473.	Burlington Industries	Greensboro, N.C.	695
474.	Union Electric	St. Louis	692
475.	Bridgestone/Firestone	Akron, Ohio	689
476.	GCIU-Employer	El Monte, Calif.	689
477.	Houston Police	Houston	687
478.	Sherwin-Williams	Cleveland	682
479.	AMP	Harrisburg, Pa.	679
480.	Oryx Energy	Dallas	678
481.	Atlanta Gen. Emp.	Atlanta	677
482.	Amstar	New Haven	674
483.	Goldman Sachs	New York	674
484.	Food/Comm. Local 27	Baltimore	672
485.	Masters, Mates & Pilots	Linth. Hts., Md.	668
486.	White Con. Industries	Cleveland	667
487.	B.F. Goodrich	Akron, Ohio	665
488.	McGraw-Hill	New York	665
489.	Dallas Police & Fire	Dallas	663
490.	McKesson	San Francisco	661
491.	Florida Progress	St. Petersburg	660
492.	Tektronix	Beaverton, Ore.	660
493.	Wisconsin Elec. Power	Milwaukee	658
494.	Carolina P&L	Raleigh, N.C.	655
495.	Teamsters Local 705	Chicago	652
496.	Westinghouse Hanford	Richland, Wash.	652
497.	Houston Firemen	Houston	650
498.	American Express	New York	648
499.	Fresno County	Fresno, Calif.	647
500.	Household Int'l	Chicago	645
501.	Sandoz	New York	641
502.	Air Prod. & Chem.	Allentown, Pa.	640
503.	CPC Int'l	E'd Cliffs, N.J.	636
504.	Michigan Con. Gas	N'ham Hts., Mich.	635
505.	Houston Municipal	Houston	633
506.	Norton Co.	Worcester, Mass.	633
507.	Atochem North America	Philadelphia	631
508.	Elec. IBEW Int'l HQ	Washington	631
509.	Lumber Prod. W. Coun.	Portland, Ore.	630
510.	Milliken & Co.	Spartanb'g, S.C.	625
511.	Teamsters No. 710	Chicago	624
512.	Timken	Canton, Ohio	622
513.	Southland	Dallas	621
514.	Teamsters No. 282	Elmont, N.Y.	621
515.	Missouri Highway	Jefferson City	617
516.	Farley Industries	Chicago	616
517.	S. Cal. Plasterers	El Monte, Calif.	616
518.	Allegheny Power	New York	615
519.	Arthur D. Little	C'bridge, Mass.	615
520.	Hospital Corp.	Nashville	613
521.	RSI Retirement	New York	613
522.	Western Union	Up.Sad.Br., N.J.	613
523.	Inter-Amer. Dev. Bank	New York	610
524.	Laborers Int'l HQ	Washington	608
525.	Electronic Data Systems	Dallas	607
526.	McDonald's Corp.	Oak Brook, Ill.	607
527.	Washington Post	Washington	607
528.	Food-Comm. Nat'l HQ	Washington	604
529.	Thiokol	Ogden, Utah	604
530.	Longshoremen/ILA	New York	603
531.	Comm. Wkrs./Int'l Typ.	Colorado Springs	602
532.	Cargill	Minneapolis	600
533.	Dresser	Dallas	600
534.	Graphic Comms. Int'l	Washington	600
535.	Pitney Bowes	Stamford, Conn.	600
536.	Beazer East	Pittsburgh	598
537.	Farmland Industries	Kansas City, Kan.	598
538.	Illinois Tool Works	Glenview	587
539.	Major League Players	New York	584
540.	Op. Egrs. No. 324	B'ham, Mich.	584
541.	Seattle City	Seattle	584
542.	Chicago Firemen	Chicago	580
543.	Paper Industry Int'l	Nashville	580
544.	Avon Products	New York	579
545.	Baton Rouge Police	Baton Rouge, La.	577
546.	Eastern Air Pilots	Boston	574
547.	Carpenters/Detroit	Ferndale, Mich.	573
548.	Laborers/Mass. State	Newton	573
549.	Premark Int'l	Deerfield, Ill.	573
550.	Brunswick	Skokie, Ill.	570
551.	Fort Worth Employees	Fort Worth	570
552.	H.J. Heinz	Pittsburgh	570
553.	Parker-Hannifin	Cleveland	570
554.	Paramount Comm.	New York	569
555.	Cleveland-Cliffs	Cleveland	568
556.	Elec. Wkrs./S. Cal.	Los Angeles	568
557.	Roadway Services	Akron, Ohio	564
558.	Denver Employees	Denver	562
559.	Aon Corp.	Chicago	559
560.	Fairfax County Schools	Springfield, Va.	558
561.	San Diego G&E	San Diego	556
562.	San Joaquin County	Stockton, Calif.	550
563.	Joseph E. Seagram	New York	550
564.	Rio Grande Industries	Denver	548
565.	Transco Energy	Houston	547
566.	Carpenters/Philadelphia	Philadelphia	546
567.	Bull HN	Billerica, Mass.	545
568.	R.H. Macy	New York	545
569.	Johnson & Higgins	New York	544
570.	Mercantile Stores	Fairfield, Ohio	542
571.	Boy Scouts of America	Irving, Texas	540
572.	Food-Comm. Butchers	Oakland, Calif.	540
573.	Briggs & Stratton	Milwaukee	539
574.	Colorado Public Service	Denver	538
575.	Woolworth	New York	537
576.	Northern Illinois Gas	Aurora, Ill.	535
577.	NIPSCO	Hammond, Ind.	535
578.	BOC Group	Murray Hill, N.J.	530
579.	Nat'l Telephone Co-Op	Washington	528
580.	Directors Guild	Los Angeles	527
581.	Elec. Cont./Chicago	Chicago	526
582.	Varian Associates	Palo Alto, Calif.	525
583.	So. Cal. Rapid Transit	Los Angeles	523
584.	McKinsey & Co.	New York	522
585.	Mack Trucks	Allentown, Pa.	521
586.	Newell	Freeport, Ill.	521
587.	PNC Financial	Pittsburgh	520
588.	Siemens	New York	520
589.	Teamsters/W. Pa.	Pittsburgh	520
590.	Davidson County	Nashville	519
591.	Louisiana Muni. Police	Baton Rouge	518
592.	Automotive Industries	Oakland, Calif.	517
593.	Cincinnati G&E	Cincinnati	517
594.	Long Island Lighting	Hicksville, N.Y.	517
595.	Uniroyal Goodrich	Greenville, S.C.	516
596.	Food-Comm./Midwest	Chicago	513
597.	Masco/Trimas	Taylor, Mich.	512
598.	L'gshore. ILWU/PMA	San Francisco	510
599.	Carpenter Technology	Reading, Pa.	509
600.	Delmarva Power & Light	Wilmington, Del.	509
601.	Henley Group	Hampton, N.H.	507
602.	Oklahoma Firefighters	Oklahoma City	507
603.	Austin Employees	Austin, Texas	506
604.	Interco	St. Louis	505
605.	Op. Egrs. Local 15	New York	504
606.	Royal Insurance	Charlotte, N.C.	504
607.	Iowa Fire & Police	W. Des Moines	502
608.	Brooklyn Union Gas	Brooklyn	500
609.	Del Monte Foods	San Francisco	500
610.	Kern County	Bakersf'd, Calif.	500
611.	Teamster Affiliates	Washintgon	500
612.	Becton, Dickinson	Frank. Lakes, N.J	496
613.	Rohr Industries	Chula Vista, Calif.	495
614.	Phoenix City	Phoenix	494
615.	Rochester G&E	Rochester, N.Y.	494
616.	Sheet Metal/N. Cal.	San Francisco	494
617.	Andersen	Bayport, Me.	493
618.	PacifiCorp	Portland, Ore.	492
619.	Seafarers Pension	Camp Spr., Md.	492
620.	Bricklayers Int'l	Washington	490
621.	Oklahoma Police	Oklahoma City	490
622.	Flint City	Flint, Mich.	488
623.	Memphis LG&W	Memphis, Tenn.	488
624.	Centel	Chicago	485
625.	Hartford City	Hartford, Conn.	485
626.	Towers, Perrin	Philadelphia	482
627.	Gerber Products	Fremont, Mich.	480
628.	Minneapolis Teachers	Minneapolis	479
629.	A.O. Smith	Milwaukee	479
630.	Geo. A. Hormel	Austin, Texas	478
631.	New England Mutual	Boston	476
632.	San Mateo County	Red. City, Calif.	476
633.	Reader's Digest	Pleasantvl., N.Y.	473
634.	Elec. Contractors/Alaska	Anchorage	472
635.	Elec. Wkrs./Alaska	Anchorage	472
636.	Miami Fire & Police	Miami	468
637.	Pneumo Abex	Hampton, N.H.	468
638.	Hearst	New York	456
639.	S. Calif. Permanente	Pasadena, Calif.	465
640.	Phelps Dodge	Phoenix	464
641.	Chicago Sanitary District	Chicago	463
642.	Belk/Leggett Stores	Charlotte, N.C.	462
643.	Op. Egrs. Local 825	Newark, N.J.	460
644.	Marine Egrs. Dist. 2	Dania, Fla.	458
645.	V F Corp.	Reading, Pa.	457
646.	Hotel/Rest. Wkrs. 165	Las Vegas	456
647.	Arizona Public Service	Phoenix	454
648.	Coca-Cola Enterprises	Atlanta	454
649.	Producer-Writers Guild	Burbank, Calif.	454
650.	MCI Communications	Washington	453
651.	Metal Industry/West	Seattle	453
652.	Stanley Works	New Brit., Conn.	451
653.	Gates	Denver	450
654.	Laborers/Ohio District	Columbus, Ohio	450
655.	Publix Super Markets	Lakeland, Fla.	450
656.	Humana	Louisville, Ky.	448
657.	Science App. Int'l	San Diego	448
658.	Williams Co.	Tulsa	448
659.	Alcan Aluminium	Montreal	447
660.	Knight-Ridder	Miami	446
661.	TECO Energy	Tampa	445
662.	USG	Chicago	445
663.	Am. Cotton Gar./All. Ind.	New York	444
664.	Nat'l Industrial Group	Newark, N.J.	444
665.	Daughters of Charity	St. Louis	443
666.	Sheet Metal Local 108	Los Angeles	443
667.	Boston Edison	Boston	442
668.	Trinova	Maumee, Ohio	441
669.	S.C. Johnson	Racine, Wis.	437
670.	Sonat	Birmingham, Ala.	437
671.	Unit. Serv. Auto. Assoc.	San Antonio	437
672.	Teamsters/Philadelphia	Philadelphia	436
673.	Lincoln National	Fort Wayne, Ind.	435
674.	La. Parochial Emp.	Baton Rouge, La.	435
675.	Perkin-Elmer	Norwalk, Conn.	435
676.	Teamsters/Alaska	Anchorage	435
677.	Upholsterers/Int'l HQ	Philadelphia	434
678.	Tampa Police & Fire	Tampa	432
679.	Burroughs Wellcome	Res. Triangle Pk.	430
680.	Ins. Co. Supp. Orgs.	Washington	429
681.	St. Louis Public Schools	St. Louis	427
682.	Fireman's Fund Ins.	Novato, Calif.	426
683.	Nat'l Intergroup	Pittsburgh	425
684.	Intel	Santa Cl., Calif.	424
685.	Salt River Project	Phoenix	423
686.	Washington Gas	Washington	423
687.	Kansas City P&L	Kansas City, Mo.	421
688.	Pipe Trades No. 447	Los Angeles	421
689.	Reliance Electric	Mayf'ld Hts., Ohio	420
690.	Building Trades United	Milwaukee	417
691.	Hawaiian Electric	Honolulu	417
692.	Arlington County	Arlington, Va.	415
693.	Adolph Coors	Golden, Colo.	415
694.	Laborers/W. Pa.	Pittsburgh	414
695.	Nat'l Fuel Gas	Buffalo, N.Y.	413
696.	Syntex	Palo Alto, Calif.	413
697.	Fresno City	Fresno, Calif.	412
698.	Maritime Assoc.	Houston	412
699.	Hershey Foods	Hershey, Pa.	410
700.	Plumbers/Pipe. No. 597	Chicago	405
701.	Cultural Inst., N.Y.	New York	402
702.	Waste Management	Oak Brook, Ill.	402
703.	Allegheny Port Authority	Pittsburgh	400
704.	Borg-Warner	Chicago	400
705.	Rochester Telephone	Rochester, N.Y.	400
706.	Plaster-Mason/S. Calif.	El Monte, Calif.	399
707.	Carpenters/Mass.	Wilm'ton, Mass.	398
708.	Bank of New York	New York	396
709.	American Standard	New York	395
710.	Carpenters/Illinois	Geneva, Ill.	394
711.	Potlatch	Walnut Cr., Calif.	394
712.	Cincinnati Milacron	Cincinnati	393
713.	Walt Disney	Burbank, Calif.	393
714.	Agway	Syracuse, N.Y.	391
715.	Dan River	Danville, Va.	391
716.	Baton Rouge/E. B.R.	Baton Rouge, La.	390
717.	Consolidated Papers	Wisconsin Rapids	389
718.	Maryland Supplemental	Baltimore	389
719.	Loral	New York	388
720.	Springs Industries	Fort Mill, S.C.	388
721.	Alco Standard	Valley Forge, Pa.	387
722.	New York Times	New York	387
723.	PaineWebber	Weehawken, N.J.	387
724.	Cyclops Industries	Pittsburgh	385
725.	Wash. Metro Transit	Washington	385
726.	Morton International	Chicago	384
727.	Building Service	San Francisco	383
728.	Equifax	Atlanta	382
729.	Carpenters/St. Louis	St. Louis	381
730.	Libbey-Owens-Ford	Toledo, Ohio	380
731.	Food-Comm. No. 1001	Bellevue, Wash.	379
732.	Loews	New York	377
733.	Vermont State	Montpelier	376
734.	Wis. Public Service	Green Bay	376
735.	Graybar Electric	St. Louis	375
736.	Sequa	New York	375
737.	Birmingham City	Birmingham, Ala.	373
738.	Blue Cross Mich.	Detroit	373
739.	Auto Wkrs./Nat'l HQ	Detroit	372
740.	Gulf States Utilities	Beaumont, Texas	372

Source: *Pensions & Investments* and Money Market Directories Inc.

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
741.	Penn Central	Cincinnati	372
742.	Sonoco Products	Hartsville, S.C.	372
743.	Square D	Palatine, Ill.	372
744.	Dillon	Hutchinson, Kan.	371
745.	IMCERA Group	Northbrook, Ill.	371
746.	L'shoremen STA-ILA	Baltimore	370
747.	Iron Wkrs. 40/361/417	New York	369
748.	Ball	Muncie, Ind.	368
749.	Primerica	Baltimore	367
750.	Savings Banks Emp.	Woburn, Mass.	365
751.	DeKalb County	Decatur, Ga.	364
752.	Kollmorgan	Simsbury, Conn.	364
753.	Oakland County	Pontiac, Mich.	363
754.	First Bank System	Minneapolis	362
755.	Kansas Power & Light	Topeka, Kan.	362
756.	St. Louis Police	St. Louis	360
757.	Carpenters/W. Wash.	Seattle	359
758.	A.G. Edwards	St. Louis	359
759.	Iron Wkrs./N. N.J.	Newark, N.J.	359
760.	Marin County	San Rafael, Calif.	359
761.	Nat'l Football League	New York	359
762.	Norfolk City	Norfolk, Va.	359
763.	Clark Equipment	South Bend, Ind.	358
764.	Chubb	Warren, N.J.	357
765.	Arkla	Shreveport, La.	355
766.	Ryder System	Miami	355
767.	Yellow Freight	O'land Park, Kan.	355
768.	Chi. Park Employees	Chicago	352
769.	Zenith Electronics	Chicago	352
770.	Actors Equity-League	New York	351
771.	Commonwealth Energy	C'bridge, Mass.	351
772.	Chicago Def. Comp.	Chicago	350
773.	Santa Barbara County	Santa Barbara	350
774.	Duquesne Light	Pittsburgh	348
775.	Fort Howard	Green Bay	347
776.	San Antonio F&P	San Antonio	347
777.	Service Emp. No. 144	New York	347
778.	J.M. Huber	Edison, N.J.	345
779.	Portland Gen. Electric	Portland, Ore.	343
780.	Dow Jones	New York	342
781.	Food Lion	Salisbury, N.C.	342
782.	ENSERCH	Dallas	341
783.	ALLTEL	Little Rock, Ark.	339
784.	Kerr-McGee	Oklahoma City	338
785.	Laborers Nos. 472/172	Jersey City	338
786.	Arkansas State Highway	Little Rock, Ark.	335
787.	Bowater	Darien, Conn.	335
788.	Mark IV Industries	Amherst, N.Y.	335
789.	Commerce Cl. House	Chicago	334
790.	Carpenters/W. Pa.	Pittsburgh	333
791.	Scana	Columbia, S.C.	333
792.	Pechiney	G'wich, Conn.	332
793.	Nat'l Gypsum	Dallas	331
794.	Pennsylvania Municipal	Harrisburg, Pa.	331
795.	Nat'l Maritime Union	New York	330
796.	Vulcan Materials	Birmingham, Ala.	330
797.	Amerada Hess	New York	329
798.	Marmon Group	Chicago	328
799.	Outboard Marine	Waukegan, Ill.	328
800.	St. Paul Teachers	St. Paul, Minn.	327
801.	Machinists Local 9	Bridgeton, Mo.	325
802.	Cox Enterprises	Atlanta	324
803.	Capital Holding	Louisville, Ky.	322
804.	Iron Wkrs./Ohio	Ch'leston, W.Va.	321
805.	Lowe's	N. Wilkes., N.C.	319
806.	Textile Wkrs./Nat'l HQ	Lincoln, R.I.	319
807.	Simpson Investment	Seattle	318
808.	Michelin Tire	Greenville, S.C.	317
809.	Carpenters/Intl. HQ	Washington	316
810.	Elf Aquitaine	New York	316
811.	Nashville/Davidson Cty.	Nashville	316
812.	Cons. Freightways	Palo Alto, Calif.	315
813.	Knoxville City	Knoxville, Tenn.	315
814.	Laborers/N.Y. 23-13	New York	314
815.	Marion Merrell Dow	Kansas City, Mo.	313
816.	Mass. General Hospital	Boston	312
817.	Elec. Wkrs. Local 332	San Jose	311
818.	Hotel/Rest. Local 1	Naperville, Ill.	311
819.	S.W. Public Service	Amarillo, Texas	311
820.	Lab. Ak. 341/942/1331	Seattle	310
821.	Prince Georges County	Up. Marlb'o, Md.	309
822.	St. Louis City	St. Louis	308
823.	Tecumseh Products	Tecumseh, Mich.	308
824.	Plumbers No. 525	Las Vegas	307
825.	Shelby County	Memphis	306
826.	Miami Beach City	Miami Beach	305
827.	Norcal Waste Systems	San Francisco	305
828.	Rubbermaid	Wooster, Ohio	304
829.	ARA Services	Philadelphia	303
830.	Dravo	Pittsburgh	303
831.	Laborers Local 253	Jacksonville, Fla.	303
832.	Levi Strauss	San Francisco	303
833.	Teamsters Local 182	Utica, N.Y.	303
834.	Oklahoma G&E	Oklahoma City	302
835.	Laborers Local 731	New York	301
836.	Ohio Casualty	Hamilton, Ohio	301
837.	Leo Burnett	Chicago	300
838.	K.C. Public Schools	Kansas City, Mo.	300
839.	New York State Nurses	Albany, N.Y.	300
840.	ONEOK	Tulsa	299
841.	SKF USA	King/Prussia, Pa.	299
842.	Super Valu Stores	Eden P'rie, Minn.	298
843.	First Boston	New York	296
844.	World Color Press	Effingham, Ill.	295
845.	Moorman Mfg.	Quincy, Ill.	294
846.	Cooper Tire & Rubber	Findlay, Ohio	293
847.	Sisters of Mercy Detroit	Farmington Hills	293
848.	Iron Wkrs. Local 25	Novi, Mich.	292
849.	L'shore. New Orleans	New Orleans	292
850.	Wickes	Santa Monica	292
851.	Food-Comm. Local 7	Wheat Rg., Colo.	291
852.	Illinois Power	Decatur, Ill.	291
853.	MAPCO	Tulsa	291
854.	Wm. Wrigley	Chicago	291
855.	Dial	Phoenix	290
856.	Wichita Retirement	Wichita, Kan.	289
857.	Carpenters/N.J.	Madison, N.J.	288
858.	Arvin Industries	Columbus, Ind.	287
859.	Op. Engrs. Local 542	Norristown, Pa.	287
860.	Deloitte & Touche	New York	285
861.	Iron Wkrs./Mid-Amer.	Lansing, Ill.	285
862.	Omaha Schools	Omaha	285
863.	Price Waterhouse	Tampa	285
864.	Machinists/Auto No. 289	Seattle	284
865.	Kansas City Emp.	Kansas City, Mo.	283
866.	Kansas City Police	Kansas City, Mo.	283
867.	Carpenters/Twin Cities	Minneapolis	281
868.	Oakland Muni/P&F	Oakland, Calif.	281
869.	Wichita Retirement	Wichita, Kan.	281
870.	Akzo America	Chicago	280
871.	Anne Arundel County	Annapolis, Md.	280
872.	WITCO	New York	280
873.	Steelwkrs./Nat'l HQ	Pittsburgh	278
874.	Elec. Wkrs. Local 1186	Honolulu	277
875.	Ohio Highway Patrol	Columbus	277
876.	Federal Mogul	Detroit	276
877.	Pittston Co.	Stamford, Conn.	276
878.	Sacramento City	Sac'mento, Calif.	276
879.	Koch Industries	Wichita, Kan.	275
880.	Op. Engrs. Local 66	Monroeville, Pa.	275
881.	Stanislaus County	Modesto, Calif.	275
882.	Sisters of Providence	Seattle	274
883.	PACCAR	Bellevue, Wash.	273
884.	Steamfitters Industry	New York	272
885.	Dole Food	Los Angeles	271
886.	Genuine Parts	Atlanta	271
887.	Lukens	Coatesville, Pa.	271
888.	AMICA Mutual	Providence, R.I.	270
889.	Rhone-Poulenc	Princeton, N.J.	270
890.	Thomson Electronics	Indianapolis	270
891.	Food-Comm. Local 576	Kan. City, Kan.	269
892.	Harnischfeger Ind.	Milwaukee	269
893.	Nordstrom	Seattle	268
894.	Sedgwick James	New York	268
895.	Tacoma Employees	Tacoma	267
896.	Weirton Steel	Weirton, W.Va.	267
897.	American Water Works	Voorhees, N.J.	266
898.	Louisiana Municipal	Baton Rouge	266
899.	Omaha Public Power	Omaha, Neb.	266
900.	H.E. Butt Grocery	San Antonio	265
901.	Williamette Industries	Portland, Ore.	263
902.	Continental Airlines	Houston	261
903.	Food-Comm. Local 880	Cleveland	261
904.	Elec. Wkrs. No. 103	Dorch., Mass.	260
905.	Engelhard	Iselin, N.J.	260
906.	GATX	Chicago	260
907.	Laborers/Indiana	Terre Haute, Ind.	260
908.	San Antonio Pub. Serv.	San Antonio	260
909.	Limited	Columbus, Ohio	259
910.	Iron Wkrs./Philadelphia	Philadelphia	258
911.	Puget Sound P&L	Bellevue, Wash.	258
912.	Laclede Gas	St. Louis	257
913.	United Eng. & Const.	Philadelphia	257
914.	Home Savings/Amer.	Irwindale, Calif.	256
915.	Atlantic City Electric	Pleasantv'le, N.J.	255
916.	Continental Grain	New York	255
917.	Harsco	Camp Hill, Pa.	255
918.	Keystone Cons. Ind.	Dallas	255
919.	Lubrizol	Wickliffe, Ohio	255
920.	Bemis	Minneapolis	254
921.	Food-Comm./So. Calif.	Los Angeles	254
922.	Allis-Chambers	Milwaukee	252
923.	Wash. State Def.Comp.	Olympia, Wash.	252
924.	Laborers/Alaska	Fairbanks	251
925.	Foxboro	Foxboro, Mass.	250
926.	Intermount'n Health	Salt Lake City	250
927.	MCA	Universal City	250
928.	Roofers, Waterproofers	Washington	250
929.	Banco Pop. Puerto Rico	Hato Rey, P.R.	249
930.	Providence Employees	Providence, R.I.	249
931.	Sony	Park Ridge, N.J.	249
932.	SPX	Muskegon, Mich.	249
933.	A.E. Staley	Decatur, Ill.	248
934.	PSI Energy	Plainfield, Ind.	247
935.	Ill. Cent. Mgmt. Services	Springfield	246
936.	Painters Int'l	Washington	246
937.	Brown-Forman	Louisville, Ky.	245
938.	Food-Comm. No. 464A	Little Falls, N.J.	245
939.	Grand Union	Wayne, N.J.	245
940.	Teamsters Mid-Jersey	N. B'wick, N.J.	245
941.	UST	G'wich, Conn.	245
942.	Copley Press	La Jolla, Calif.	244
943.	Anchorage Police/Fire	Anchorage	243
944.	East Bay Muni. Utility	Oakland, Calif.	243
945.	Amer. Family Mutual	Madison, Wis.	242
946.	M.A. Hanna	Cleveland	242
947.	Teamsters Local 641	Union, N.J.	242
948.	American Greetings	Cleveland	241
949.	Kennametal	Latrobe, Pa.	241
950.	Archer Daniels Midland	Decatur, Ill.	240
951.	Cleveland Hosp. Assn.	Cleveland	240
952.	Op. Engrs. Local 428	Phoenix	240
953.	Service Employees Int'l	Washington	240
954.	Food/Comm. Local 555	Portland, Ore.	239
955.	W.W. Grainger	Skokie, Ill.	239
956.	United Brands	Cincinnati	239
957.	Painters Dist. 9	New York	238
958.	Vista Chemical	Houston	238
959.	Auto. Club, So. Calif.	Los Angeles	237
960.	TBG	New York	237
961.	Twin City Pipe Trades	St. Paul, Minn.	237
962.	Jack Eckerd	Clearwater, Fla.	236
963.	Kentucky Def. Comp.	Frankfort, Ky.	236
964.	U.S. Borax & Chemical	Los Angeles	236
965.	Wyatt	Washington	236
966.	Indianapolis P&L	Indianapolis	235
967.	Richmond Supp.	Richmond, Va.	234
968.	YWCA	New York	233
969.	General Tire	Akron, Ohio	232
970.	Cabot	Waltham, Mass.	231
971.	Henry Ford Health Sys.	Detroit	231
972.	Nucor	Charlotte, N.C.	231
973.	Tandy	Fort Worth	231
974.	AMAX	New York	230
975.	Orlando Employees	Orlando, Fla.	230
976.	Pentair	St. Paul, Minn.	230
977.	Kaman	Stamford, Conn.	229
978.	Liggett Group	Durham, N.C.	229
979.	Newport News City	N'port News, Va.	229
980.	Questar	Salt Lake City	228
981.	St. Louis Firemen	St. Louis	228
982.	Iron Wkrs. Local 580	New York	227
983.	Laborers/Conn.	W. Haven, Conn.	227
984.	Fieldcrest Cannon	Eden, N.C.	226
985.	Idaho Power	Boise, Idaho	225
986.	Plumb. 444/159/342/343	San Francisco	225
987.	Diversified Energies	Minneapolis	224
988.	Great Western Fin.	Beverly Hills	223
989.	Hotel Trades Council	New York	223
990.	Amdahl	Sunnyvale, Calif.	222
991.	Brown Group	St. Louis	222
992.	Machinists Local 701	Chicago	222
993.	Walter Industries	Tampa	222
994.	Elec. Products Ind.	Flushing, N.Y.	221
995.	Hartford Hospital	Hartford, Conn.	221
996.	Iron Wkrs./Seattle	Seattle	221
997.	Pontiac Retirement	Pontiac, Mich.	221
998.	Tampa City	Tampa	221
999.	Baker Hughes	Houston	220
1000.	Genesee County	Flint, Mich.	220

201-1,000 Total	**518,337**
Top 200 Total	**1,669,616**
1,000 Total	**2,187,953**

Profiles of the nation's 200 largest pension funds start on page 28.

Source: *Pensions & Investments* and Money Market Directories Inc.

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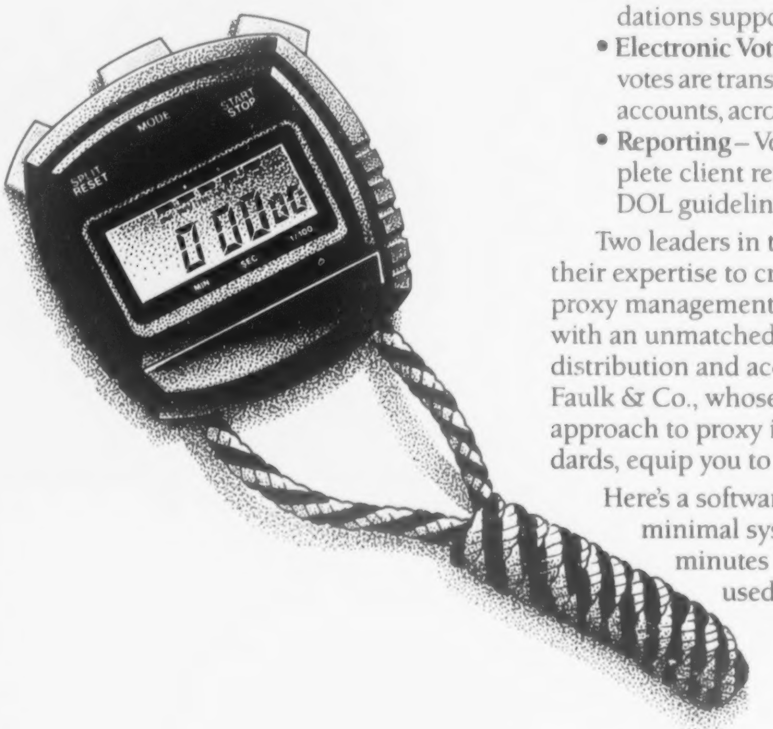

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A

Abbott Laboratories

	($ millions)
Total assets	2,681
Defined benefit	1,061
401(k)	1,620
Employer DB contributions	0
Benefit payments	32
Employer DC contributions	27
Defined benefit asset mix:	
Stocks	59%
Fixed income	41%
Defined contribution asset mix:	
Company stock	90%
GICs/BICs	10%

ABBOTT PARK, Ill. — As of Sept. 30, Abbott Laboratories' total employee benefit assets increased 21.3% from a year earlier. Defined benefit assets increased 18% during the same period; defined contribution assets increased 23.6%.

Equity managers: Domestic — Hagler, Mastrovita & Hewitt; Jennison; Leylegian; RCM; and Sirach.

Fixed-income managers: Domestic — RCM.

The master trustee is Continental Bank.

The key person overseeing the investment management of the fund is A.G. Olsen, director.

Aetna Life & Casualty Co.

	($ millions)
Total assets	3,107
Defined benefit	1,950
Total defined contribution	1,157
401(k)	1,129
Thrift/savings	28
Employer DB contributions	0
Benefit payments	47
Employer DC contributions	41
Internally managed assets:	
Total DB	1,950
Total DC	1,157
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	71.5%
Fixed income	6.7%
Cash equivalents	0.3%
Real estate equity	4.3%
Mortgages	1.1%
IPGs	16.1%
Defined contribution asset mix:	
Company stock	18.8%
Other stock	8.8%
GICs/BICs	72.4%

HARTFORD, Conn. — As of Sept. 30, Aetna Life & Casualty Co.'s total employee benefit assets increased 12.7% from a year earlier. Defined benefit assets increased 9.9% during the same period; defined contribution assets increased 17.7%.

All of Aetna's assets are managed internally.

The master trustee is Connecticut National Bank.

Kenneth P. Weissman, director-benefit development, oversees the fund.

Retirement Systems of Alabama

	($ millions)
Total assets*	9,920
Defined benefit	9,920
Employer DB contributions	365
Benefit payments	426

**book value*

Internally managed assets	9,920
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	9%
Fixed income	57%
Cash equivalents	12%
Real estate equity	1%
Mortgages	21%

MONTGOMERY, Ala. — As of Sept. 30, the Retirement Systems of Alabama's total employee benefit assets increased 12.4% from a year earlier. All assets are defined benefit, and managed internally.

The safekeeping agent is AmSouth Bank; the global custodian is Morgan Stanley Trust.

Key personnel overseeing the investment management of the fund are David G. Bronner, chief executive officer; Hunter Harrell, director of investments; and Cheryl Duke, director of equities.

Alaska Retirement Systems

	($ millions)
Total assets*	4,800
Defined benefit	4,800

**as of June 30, 1991*

Internally managed assets	2,300
Defined benefit asset mix:	
Domestic stocks	40%

International stocks	9%
Fixed income	47%
Cash equivalents	1%
Real estate equity	4%
Mortgages	5%

JUNEAU, Alaska — As of June 30, the Alaska Retirement Systems' total employee benefit assets increased 8.4% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Fred Alger; INVESCO; Lehman Ark; Miller, Anderson & Sherrerd; State Street Bank; and United Capital.

International — Citicorp and J.P. Morgan.

Real estate managers: Aetna; Equitable; Hancock; JMB; Karsten; J.P. Morgan; Sentinel.

The master custodian and global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are Darrel Rexwinkel, deputy commissioner; Steve R. Stein, chief investment officer; Michael S. Cheung, fixed-income manager; Steve Verschoor, investment officer; and Marty Lentz, real estate investment officer.

Allied-Signal Inc.

	($ millions)
Total assets	7,000
Defined benefit	5,000
Total defined contribution	2,000
Employer DB contributions	80
Benefit payments	310
Internally managed assets:	
Total DB	1,500
Defined benefit asset mix:	
Stocks	40%
Fixed income	37%
Cash equivalents	6%
International	6%
Other	11%
Defined contribution asset mix:	
Company stock	45%
Other stock	12%
Fixed income	43%

MORRISTOWN, N.J. — As of Sept. 30, Allied-Signal's total employee benefit assets increased 21.3% from a year earlier. Defined benefit assets increased 22.9% during the same period; defined contribution assets increased 17.6%.

Master trustees are Northern Trust for the defined benefit plan and State Street Bank for the defined contribution plan.

Key personnel overseeing the investment management of the fund are Edward T. Tokar, vice president-investments; Mark E. Smith, senior portfolio manager; and Jay W. Burden, portfolio manager.

Aluminum Co. of America

	($ millions)
Total assets	3,679
Defined benefit	2,923
401(k)	756
Employer DB contributions	74
Benefit payments	200
Employer DC contributions	50
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	28%
Fixed income	62%
Cash equivalents	7%
Real estate equity	2%
Other	8%
Defined contribution asset mix:	
Company stock	25%
Other stock	10%
GICs/BICs	65%

PITTSBURGH — As of Sept. 30, Aluminum Co. of America's total employee benefit assets increased 12.5% from a year earlier. Defined benefit assets increased 12.4% during the same period; defined contribution assets increased 12.8%.

Equity managers: Domestic — Mellon Capital; State Street Bank; Wells Fargo Nikko.

International — Capital Guardian; Dimensional; Mercator.

Fixed-income managers: Domestic — Mellon Bond; Prudential Fixed Income.

International — MFS; PCM; Strategic Fixed Income.

Real estate managers: Coldwell; Equitable; RREEF.

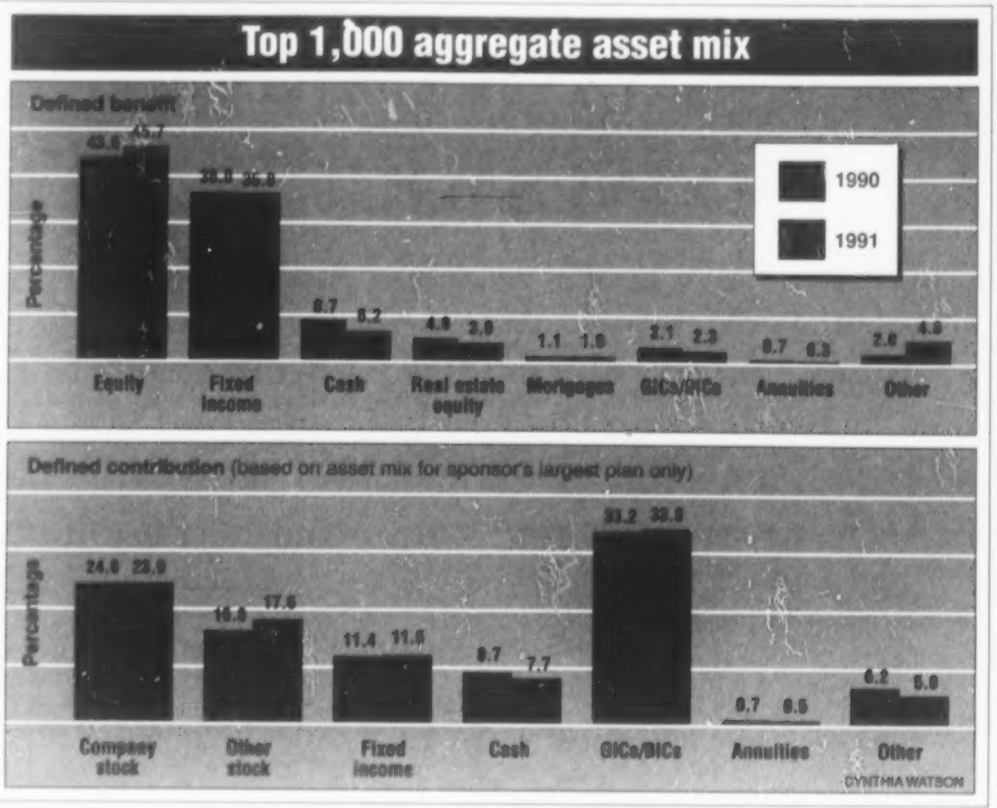
Global asset allocation managers: Brinson; TCW/Cursitor Eaton.

The master trustee and global custodian is Mellon Bank.

Key personnel overseeing the investment management of the fund are Joseph C. Pellegrino, vice president-pension fund investments and analysis; Jack P. Klingler, manager-trust investments; and Donna S. Barr, manager-trust investment administration and analysis.

American Airlines

	($ millions)
Total assets	4,750
Defined benefit	2,500
Total defined contribution	2,250
401(k)	650
Money purchase	1,600
Employer DB contributions	150
Benefit payments	104
Employer DC contributions	105
Internally managed assets:	
Total DB	45
Total DC	135
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	25%
Fixed income	71%
Cash equivalents	2%
Real estate equity	1%
Annuities	1%
Defined contribution asset mix:	
Other stock	91%
Fixed income	4%
Cash equivalents	5%



Top 1,000 aggregate asset mix

CYNTHIA WATSON

DALLAS/FORT WORTH INTERNATIONAL AIRPORT — As of Sept. 30, American Airlines's total employee benefit assets, defined benefit assets and defined contribution assets all increased 25% from a year earlier.

Equity managers: Domestic — Atlanta Capital; Barrow Hanley; Boatmen's; Capital Guardian; Cashman Farrell; Confederation Life; Dewey Square; Dreman; Ganucheau; Hotchkis & Wiley; IIA; United Capital.

International — HD International; Morgan Grenfell; Morgan Stanley; Rowe Price-Fleming; Templeton.

Fixed-income managers: Domestic — Barrow Hanley; Capital Guardian; Dewey Square; Goldman Sachs; Hotchkis & Wiley; IIA; J.P. Morgan; NISA.

International — HD International; Morgan Grenfell; Morgan Stanley; Rowe Price-Fleming; Templeton.

Real estate managers: GE Investments; Prentiss Properties; Zell/Merrill Lynch.

Other managers: Hicks Muse; Triad Ventures; Zell/Chilmark.

The master trustee is NCNB-Texas; the global custodian is Chase.

Key personnel overseeing the investment management of the fund are William F. Quinn, president, AMR Investment Services; Dennis M. O'Hara, vice president-trust investments; and Michael W. Fields, vice president-fixed income.

American Electric Power Service Corp.

	($ millions)
Total assets	2,124
Defined benefit	1,367
Total defined contribution	757
Thrift/savings	743
ESOP	14
Employer DB contributions	na
Benefit payments	63
Employer DC contributions	17
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	64%
Fixed income	22%
Cash equivalents	10%
Other	4%
Defined contribution asset mix:	
Company stock	36%
Other stock	11%
GICs/BICs	46%
Cash equivalents	7%

COLUMBUS, Ohio — As of Sept. 30, American Electric Power Service Corp.'s total employee benefit assets increased 15.3% from a year earlier. Defined benefit assets increased 13.4% during the same period; defined contribution assets increased 18.8%.

The master trustee is Bank of New York.

Key personnel overseeing the investment management of the fund are Gerald P. Maloney, executive vice president and chief financial officer, and Joseph H. Shepard Jr., manager-corporate benefit funds.

American Stores Co.

	($ millions)
Total assets	2,276
Defined benefit	55
Profit-sharing	2,221
Employer DB contributions	0.2
Benefit payments	0.2
Employer DC contributions	78
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	9%
Fixed income	49%
Cash equivalents	42%
Defined contribution asset mix:	
Company stock	10%
Other stock	36%
Fixed income	46%
Cash equivalents	8%

SALT LAKE CITY — As of Sept. 30, American Stores Co.'s total employee benefit assets increased 22.8% from a year earlier. Defined benefit assets decreased 3.8% during the same period; defined contribution assets increased 23.3%.

Equity managers: Domestic — Institutional Capital; Lazard Freres; RCM; Fayez Sarofim; Templeton.

International — Baring International; Rowe Price-Fleming; Templeton.

Fixed-income managers: Domestic — Harris Investment; Lowe Brockenbrough Tierney & Tattersall; Neuberger Berman; PIMCO; Standish Ayer & Wood.

International — Putnam; Scudder Stevens & Clark.

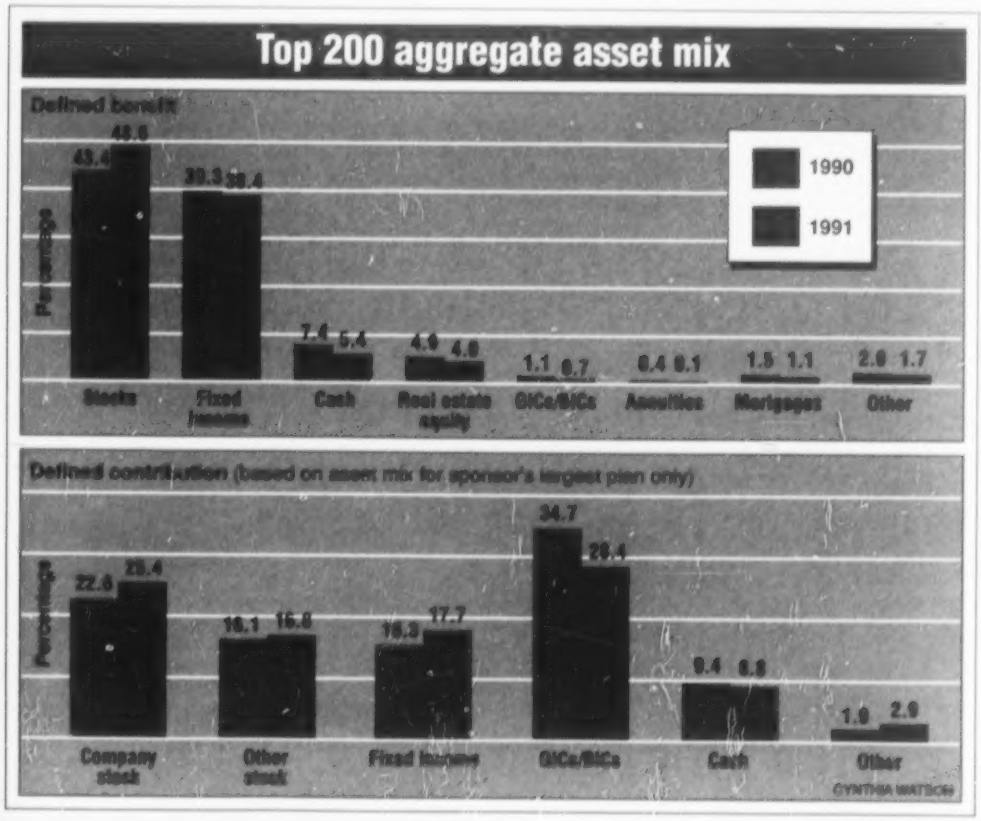
Real estate manager: Coldwell.

The master trustee and global custodian is Bankers Trust; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Scott Bergeson, senior vice president, and Duane Whitney, benefits controller.

American Telephone & Telegraph Co.

	($ millions)
Total assets	45,028
Defined benefit	35,309
Total defined contribution	9,719
401(k)	8,900
ESOP	400
Leveraged ESOP	419
Employer DB contributions	326
Benefit payments	1,644
Employer DC contributions	275
Internally managed assets:	
Total DB	2,979
Hedging devices used:	



Top 200 aggregate asset mix

CYNTHIA WATSON

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Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	57%
Fixed income	26%
Real estate equity	12%
Alternatives	5%
Defined contribution asset mix:	
Company stock	37%
Other stock	15%
Fixed income	9%
GICs/BICs	39%

BERKELEY HEIGHTS, N.J. — As of Sept. 30, American Telephone & Telegraph Co.'s total employee benefit assets increased 15.8% from a year earlier. Defined benefit assets increased 14.7% during the same period; defined contribution assets increased 20%.

Managers: Abbott Capital; AEW; Ariel; Batterymarch; Boston Co. Real Estate; Brown Brothers Harriman; Butler Capital; Capital Guardian; Chancellor; Copley Real Estate; Coldwell Banker; Corporate Property; Denver Investment; DFA; Dusco; Eastdil; Equitable Life; Fidelity International; First Reserve Energy; Goldman Sachs; GT Capital; John Hancock; Heitman; INVESCO; Investment Counselors of Maryland; Ivory & Sime; JMB; Jennison Associates; Karsten; Lincoln Capital; J.P. Morgan; Morgan Grenfell; Morgan Stanley; O'Connor; PIMCO; Prudential Asset; Roll and Ross; RREEF; RCM; Standish, Ayer & Wood; State Street Research; United Capital; UBS Asset; Warburg, Pincus; Wellington Asset; Wells Fargo; Western Asset.

The master trustees are Bankers Trust, FNB Atlanta; Mellon Bank, NCNB-Texas, State Street Bank and Wachovia-Georgia; the global custodian is Chase Manhattan Bank; the investment consultant is Russell.

Key personnel overseeing the investment management of the fund are David P. Feldman, corporate vice president-investment management, and Robert E. Angelica, investment vice president.

AMERITECH

	($ millions)
Total assets*	15,600
Defined benefit	13,200
401(k)	2,400

**P&I estimate*

CHICAGO — As of Sept. 30, *Pensions & Investments* estimates AMERITECH's total employee benefit assets increased 17.8% from a year earlier. Defined benefit assets increased an estimated 20% during the same period; defined contribution assets increased an estimated 7.1%.

Amoco Corp.

	($ millions)
Total assets	4,825
Defined benefit	2,485
Thrift/savings/401(k)	2,340
Employer DB contributions	3
Benefit payments	200
Employer DC contributions	68
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	73%
Fixed income	16%
Cash equivalents	2%
Real estate equity	4%
Other	5%
Defined contribution asset mix	
Company stock	70%
Cash equivalents	30%

CHICAGO — As of Sept. 30, Amoco Corp.'s total employee benefit assets increased 3.4%. Defined benefit assets increased 14.8% during the same period; defined contribution assets decreased 6.4%.

Equity managers: Domestic — Bankers Trust; DFA; Forstmann Leff; Franklin Portfolio; Jacobs Levy; Sarofim; and UBS Asset Management.

International — Acadian; Boston International; and State Street Bank.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts; PIMCO; and Security Capital.

Real estate manager: Equitable.

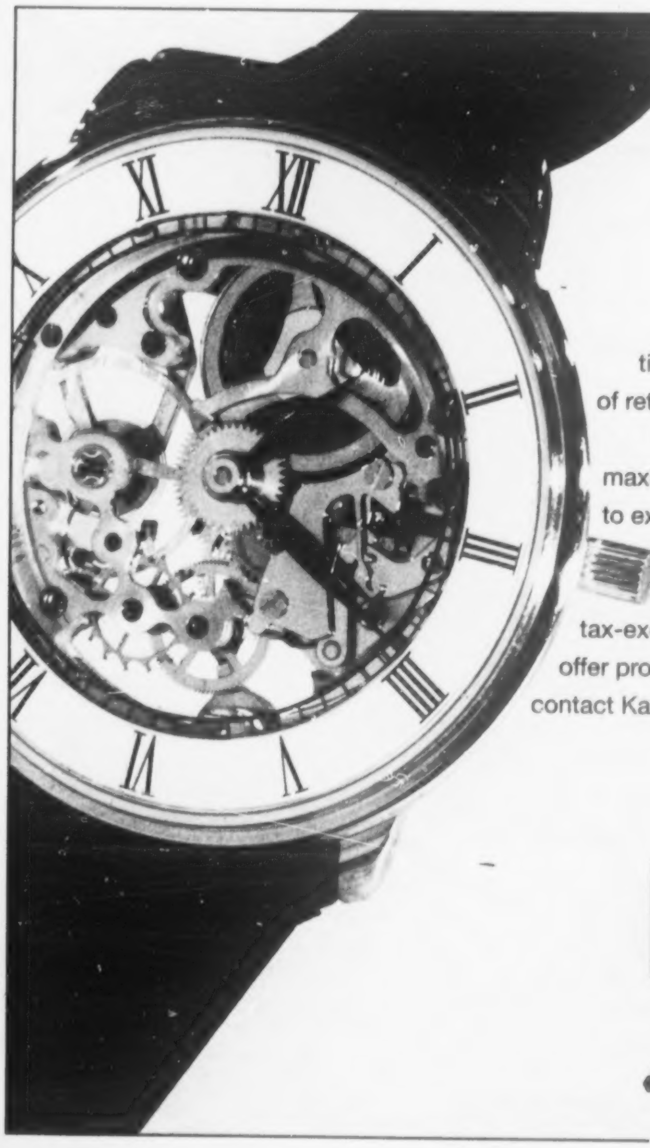
The master trustee and global custodian is Chase Manhattan.

Key personnel overseeing the investment management of the fund are Marvin L. Damsma, director-pension administration, and John S. Ruey, administrative manager-investments.

Anheuser-Busch Cos. Inc.

	($ millions)
Total assets	2,023
Defined benefit	1,111
Total defined contribution	912
401(k)/ESOP	818
Other	94
Employer DB contributions	33
Benefit payments	45
Employer DC contributions	48
Defined benefit asset mix:	
Stocks	54.2%
Fixed income	39.5%
Cash equivalents	0.8%
Real estate equity	5.5%
Defined contribution asset mix	
Company stock	85.8%
Other stock	5.8%
GICs/BICs	6.4%
Cash equivalents	2%

ST. LOUIS — As of Sept. 30, Anheuser-Busch Cos.' total employee



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benefit assets increased 1.9% from year earlier. Defined benefit assets increased 16.7% during the same period; defined contribution assets decreased 11.8%.

Equity managers: Domestic — Dalton, Greiner; Independence; Mellon Capital; Frank Russell; and Vanguard.

Fixed-income managers: Domestic — Boatmen's; Equitable Capital; General American; Independence; Mellon Capital; J.P. Morgan; and Frank Russell.

Real estate managers: Aetna; Equitable; JMB; and LaSalle.

The master trustee is Boatmen's Trust.

Key personnel overseeing the investment management of the fund are Jerry Ritter, vice president and group executive; Gerald Thayer, vice president and treasurer; and David Sauerhoff, manager-corporate pension investment.

Arizona State Retirement System

	($ millions)
Total assets	8,850
Defined benefit	8,850
Employer DB contributions	133
Benefit payments	320
Defined benefit asset mix:	
Stocks	45%
Fixed income	52%
Mortgages	3%

PHOENIX, Ariz. — As of Sept. 30, the Arizona State Retirement System's total employee benefit assets increased 22.3% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; IDS; INVESCO MIM; J.P. Morgan; and Wells Fargo Nikko.

International — State Street Bank and Wells Fargo.

Fixed-income managers: Domestic — Boston Co.; Duff & Phelps; IDS; INVESCO MIM; J.P. Morgan; and Wells Fargo Nikko.

Arizona mortgage manager: Valley National Bank.

The master custodian and global custodian is Mellon Bank; the investment consultant is Mercer.

Key personnel overseeing the investment management of the fund are Donna M. Buelow, investment accounting manager; Theresa Donohue, investment accounting manager-domestic trades; and Juanita Miller, investment accounting manager-foreign trades and portfolios.

Top 200 funds by category

Top corporate funds

Fund	($ millions)
AT&T	45,028
General Motors	40,800
General Electric	31,078
IBM	29,000
Ford Motor	22,700
Du Pont	20,501
NYNEX	16,740
AMERITECH	15,600
GTE	14,976
Bell Atlantic	14,741
Total	**251,164**

Top miscellaneous funds

Fund	($ millions)
TIAA-CREF	99,600
University of California	16,988
United Nations	9,798
United Methodists	4,333
World Bank	3,950
Southern Baptist	3,149
Presbyterian Church	2,700
Nat'l Rural Electric Co-op	2,497
Evangelical Lutheran Church	2,223
Episcopal Church	1,963
Total	**147,201**

Top public funds

Fund	($ millions)
California Employees	64,658
New York State & Local	50,081
New York City	48,876
California State Teachers	37,367
New York State Teachers	32,514
New Jersey	31,280
Texas Teachers	29,477
Florida State Board	25,517
Ohio Employees	24,272
Wisconsin State	22,790
Total	**366,832**

Top union funds

Fund	($ millions)
Central States Teamsters	11,163
Western Teamsters	10,825
UMWA	5,562
Nat'l Electrical Contractors	4,308
Boilermakers-Blacksmiths	2,834
Operating Engineers	2,570
Bakery & Confectionery	2,468
S. California UFCW	2,288
Hospital/Healthcare	2,249
I.A.M. Nat'l Pension	1,905
Total	**46,172**

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Largest defined benefit plans

Fund	($ millions)
California Employees	64,658
New York State & Local	50,081
New York City	48,876
California State Teachers	37,367
AT&T	35,309
General Motors	34,200
New York State Teachers	32,514
New Jersey	31,000
Texas Teachers	29,477
Florida State Board	25,517
Total	**388,999**

Largest defined contribution plans

Fund	($ millions)
TIAA-CREF	99,600
Federal Retirement Thrift	10,198
AT&T	9,719
Du Pont	7,215
Procter & Gamble	6,925
General Motors	6,600
Boeing	6,383
Sears, Roebuck	5,932
General Electric	5,776
Exxon	5,322
Total	**163,670**

Arkansas Teacher Retirement System

	($ millions)
Total assets	2,726
Defined benefit	2,726
Employer DB contributions	94
Benefit payments	98
Internally managed assets	43
Defined benefit asset mix:	
Stocks	45.4%
Fixed income	40.6%
Cash equivalents	10.2%
Real estate equity	0.1%
Mortgages	3.7%

LITTLE ROCK, Ark. — As of Sept. 30, the Arkansas Teacher Retirement System's total employee benefit assets increased 23% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Munder; Oppenheimer.

Fixed-income managers: Domestic — First Commercial.

The master custodian is First Commercial Bank.

The investment consultant is Shearson Lehman.

Key personnel overseeing the investment management of the fund are Bill A. Shirron, executive director; Mavolene C. Booth, associate director-investments; and Wayne Greathouse, investment administrator.

Atlantic Richfield Co.

	($ millions)
Total assets	4,028
Defined benefit	2,508
Total defined contribution	1,520
401(k)	928
Thrift/savings	592
Employer DB contributions	14
Benefit payments	157
Employer DC contributions	74
Internally managed assets:	
Total DB	1,618
Total DC	22
Defined benefit asset mix:	
Stocks	63%
Fixed income	21%
Cash equivalents	4%
Real estate equity	7%
GICs/BICs	1%
Mortgages	1%
Other	3%
Defined contribution asset mix:	
Company stock	62%
Other stock	6%
Fixed income	1%
Cash equivalents	31%

LOS ANGELES — As of Sept. 30, Atlantic Richfield Co.'s total employee benefit assets increased 12.7% from a year earlier. Defined benefit assets increased 18.9% during the same period; defined contribution assets increased 3.8%.

Equity managers: Domestic — Duncan-Hurst; Eagle Capital; Equinox Capital; GAMCO.

International — Capital Guardian; Capital International; Emerging Markets Investors; G.T. Capital; Rowe Price-Fleming; TCW.

Fixed-income managers: Domestic — W.R. Huff; J.P. Morgan; Weiss, Peck & Greer.

International — Baring International.

Real estate managers: AEW; Lehndorff; Metric.

Cash equivalent manager: Payden & Rygel.

The master trustee and global custodian is State Street Bank & Trust; the investment consultant is Collins.

Key personnel overseeing the investment management of the fund are Beverly Hamilton, vice president/investment officer; Richard W. Steenken, domestic equity director; and R. James Miller, fixed-income director.

B

Bakery & Confectionery Union & Industrial International Pension Fund

	($ millions)
Total assets	2,468
Defined benefit	2,468
Employer DB contributions	178
Benefit payments	200
Internally managed assets	148
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	45.6%
Fixed income	40.8%
Cash equivalents	6.2%
Real estate equity	0.9%
Mortgages	6.5%

KENSINGTON, Md. — As of Sept. 30, the Bakery & Confectionery Union & Industrial International Pension Fund's total employee benefit assets increased 19.2% from a year earlier. All of the assets are defined benefit.

Balanced managers: Eagle Asset; Lazard Freres; Loomis, Sayles; Investment Advisors; Mitchell Hutchins; Stein, Roe; TCW; Wertheim.

Fixed-income managers: Amalgamated Bank; Bridgewater; Mercantile; NCM Capital; Prudential Asset; V.A. Reid.

Real estate managers: AFL-CIO Housing Investment Trust/Building Investment Trust.

Index manager: Wells Fargo.

The master custodian is Mercantile Savings & Trust Bank.

Key personnel overseeing the investment management of the fund are Richard J. Swift, director of investments; J. Fleming, administrative director; and R. Gaspari, direction of operations.

BankAmerica Corp.

	($ millions)
Total assets	1,971
Defined benefit	1,075
Total defined contribution	896
401(k)	846
TRASOP	50
Employer DB contributions	50
Benefit payments	121
Employer DC contributions	38
Internally managed assets:	
Total DB	16
Total DC	770
Hedging devices used:	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	54%
Fixed income	40%
Cash equivalents	1%
Real estate equity	2%
Annuities	1%
Other	2%
Defined contribution asset mix:	
Company stock	58%
Other stock	10%
Fixed income	5%
GICs/BICs	14%
Cash equivalents	13%

SAN FRANCISCO — As of Sept. 30, BankAmerica Corp.'s total employee benefit assets increased 36.4% from a year earlier. Defined benefit assets increased 18.5% during the same period; defined contribution assets increased 66.5%.

Equity managers: Domestic — Alli-

Top 200 funds with defined contribution assets managed internally

($ millions)

Fund	Total	Equities	Bonds	Short-term	Real estate	Mortgages	Other
TIAA-CREF	99,600	40,500	26,200	4,700	5,400	20,900	1,900
Federal Retirement Thrift	9,207	0	0	9,207	0	0	0
Procter & Gamble	6,000	6,000	0	0	0	0	0
Sears, Roebuck	5,779	1,249	812	1,104	0	0	2,614
General Electric	5,776	1,160	3,871	745	0	0	0
University of California	2,889	1,489	1,321	79	0	0	0
Exxon	2,862	0	1,460	1,402	0	0	0
Texas Municipal	2,710	0	2,710	0	0	0	0
Westinghouse Electric	2,533	234	0	0	0	0	2,299
Texas County & District	2,509	0	2,509	0	0	0	0
Eastman Kodak	2,252	na	na	na	na	na	na
Prudential Insurance	1,815	262	1,553	0	0	0	0
Pacific Telesis	1,697	1,212	0	0	0	0	485
ICMA Retirement	1,421	0	0	0	0	0	1,421
Evangelical Lutheran Church	1,333	144	1,113	70	6	0	0
Metropolitan Life	1,249	230	0	0	11	0	1,008
Grumman	1,188	426	647	115	0	0	0
Aetna Life	1,157	319	0	0	0	0	838
Tenneco	893	231	0	636	0	0	26
Halliburton	774	na	na	na	na	na	na
BankAmerica	770	539	122	109	0	0	0
Bell Atlantic	767	0	0	0	0	0	767
CIGNA	734	103	627	4	0	0	0
Union Carbide	726	0	582	4	0	0	140
Travelers	616	218	398	0	0	0	0
Citibank	541	166	0	335	0	0	40
Bechtel Power	505	101	141	221	0	42	0
USX	430	220	40	0	0	0	170
Eli Lilly	425	0	0	0	0	0	425
Georgia-Pacific	350	0	0	0	0	0	350
New York Life	294	49	184	8	0	0	53
New Jersey	280	120	80	80	0	0	0
General Dynamics	231	0	231	0	0	0	0
Nat'l Rural Electric Co-op	199	59	106	34	0	0	0
Minnesota Mining & Mfg.	141	0	141	0	0	0	0
United Parcel Service	141	na	na	na	na	na	na
American Airlines	135	0	0	135	0	0	0
United Methodists	133	0	0	0	0	0	133
Minnesota State	81	0	81	0	0	0	0
Owens-Illinois	36	36	0	0	0	0	0
Atlantic Richfield	22	0	22	0	0	0	0
Kaiser Permanente	15	0	15	0	0	0	0
Total	**161,216**	**55,067**	**44,966**	**18,988**	**5,417**	**20,942**	**12,669**

Top 200 funds with indexed assets managed internally

($ millions)

		Defined benefit		Defined contribution	
Fund	Total	Indexed equities	Indexed bonds	Indexed equities	Indexed bonds
TIAA-CREF	27,800	0	0	27,800	0
New York State & Local	18,246	18,246	0	0	0
California Employees	17,947	17,947	0	0	0
California State Teachers	17,409	0	17,409	0	0
New York State Teachers	17,165	17,165	0	0	0
Florida State Board	9,372	5,505	3,867	0	0
Maryland State	7,900	1,200	6,700	0	0
General Electric	5,651	4,970	0	681	0
Du Pont	3,679	3,679	0	0	0
Colorado Employees	2,522	2,522	0	0	0
NYNEX	1,894	1,173	721	0	0
U S WEST	1,758	1,121	637	0	0
Chrysler	1,442	1,034	408	0	0
Kentucky Retirement	1,200	1,200	0	0	0
Westinghouse Electric	1,190	645	545	0	0
Washington State Board	1,009	0	1,009	0	0
State of Michigan	977	977	0	0	0
Utah State	950	950	0	0	0
Exxon	843	843	0	0	0
Prudential Insurance	838	682	156	0	0
Texas Employees	775	775	0	0	0
Sears, Roebuck	695	695	0	0	0
San Francisco City & County	618	618	0	0	0
Mass. Teachers/Employees	610	610	0	0	0
Travelers	564	455	70	39	0
UMWA	545	0	545	0	0
Georgia Teachers	540	540	0	0	0
Kentucky Teachers	424	220	204	0	0
Caterpillar	290	290	0	0	0
Alabama Retirement	266	266	0	0	0
CIGNA	242	206	36	0	0
Boeing	200	200	0	0	0
New York Life	186	0	0	2	184
Aetna Life	182	51	131	0	0
Delta Air Lines	179	179	0	0	0
Connecticut Trust	175	0	175	0	0
Metropolitan Life	43	0	0	43	0
USX	20	0	0	20	0
S. California Edison	19	19	0	0	0
Total	**146,365**	**84,983**	**32,613**	**28,585**	**184**

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ance; Mellon; Montgomery Asset; PIMCO; Wellington.

International — State Street Bank; WorldInvest.

Fixed-income managers: Domestic — Criterion; Standish Ayer & Wood; Western Asset.

International — WorldInvest.

Real estate managers: AMB; CB Commercial; Equitable; TCW.

Other managers: KKR; Oak; Weiss, Peck & Greer.

The master trustee and global custodian is Bank of America; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Joel Damon, vice president; Ray Peters, treasurer; and Frank Newman, chief financial officer.

Bechtel Power Corp.

	($ millions)
Total assets	1,929
Total defined contribution	1,929
Profit-sharing	544
401(k)	1,385
Internally managed assets	505
Hedging devices used	
Stock options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined contribution asset mix:	
U.S. stock	34%
Fixed income	26%
Cash equivalents	3%
Real estate	5%
International stock	23%
International bonds	9%

SAN FRANCISCO — As of Sept. 30, Bechtel Power Corp.'s total employee benefit assets increased 19.2% from a year earlier. All assets are defined contribution.

Equity managers: Domestic — BEA; Columbia; Dodge & Cox; Fremont Investors; Jacobs Levy; Morgan Grenfell; Sit Investment; Wellington.

International — Acadian; Boston International; J.P. Morgan; Wells Fargo Nikko.

Fixed-income managers: Domestic — Columbia; Fremont; PIMCO.

International — J.P. Morgan; Wells Fargo Nikko.

Real estate managers: Aetna; Cabot, Cabot & Forbes; Corporate Property; Prudential; RREEF.

TAA managers: Bailard, Biehl & Kaiser; Brinson; Quantilogic.

The master trustee and global custodian is Bankers Trust; the investment consultant is Fremont.

Key personnel overseeing the investment management of the fund are David Redo and Vincent P. Kuhn Jr., investment managers.

Bell Atlantic Corp.

	($ millions)
Total assets	14,741
Defined benefit	11,702
Total defined contribution	3,039
401(k)	2,340
ESOP	671
Other	28
Employer DB contributions	7
Benefit payments	492
Employer DC contributions	82
Internally managed assets:	
Total DC	767
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	51.5%
Fixed income	22.1%
Cash equivalents	2.6%
Real estate equity	13.3%
Venture capital	3.1%
TAA	7.4%
Defined contribution asset mix:	
Company stock	47%
Other stock	11%
Fixed income	7%
GICs/BICs	35%

PHILADELPHIA — As of Sept. 30, Bell Atlantic Corp.'s total employee benefit assets increased 5.7% from last year's estimated level. Defined benefit assets increased 5.2% during the same period; defined contribution assets increased 7.8%.

The master trustees are Mellon Bank for the defined benefit plan and Bankers Trust for the defined contribution plan; the global custodian is State Street Bank; the investment consultant is Russell.

The key person overseeing the investment management of the fund is Thomas Cowhey, executive director-trust investment.

BellSouth Corp.

	($ millions)
Total assets*	14,570

as of June 30, 1991

ATLANTA — As of June 30, BellSouth Corp.'s total employee benefit assets increased 3% from a year earlier.

The key person overseeing the investment management of the fund is Kincaid Patterson, managing director-trust asset management.

Bethlehem Steel Corp.

	($ millions)
Total assets	3,325

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Defined benefit	3,325
Employer DB contributions	261
Benefit payments	457
Internally managed assets	3,295
Defined benefit asset mix	
Stocks	34%
Fixed income	60%
Cash equivalents	6%

BETHLEHEM, Pa. — As of Sept. 30, Bethlehem Steel Corp.'s total employee benefit assets increased 8% from a year earlier. All assets are defined benefit.

Equity managers: International — Putnam; Morgan International Equity Fund.

The master custodian is Bankers Trust.

The key person overseeing the investment management of the fund is J. Gerard Mead, manager-pension fund.

The Boeing Co.

	($ millions)
Total assets	14,010
Defined benefit	7,627
Total defined contribution	6,383
401(k)	5,604
Other	779
Employer DB contributions	500
Benefit payments	300
Employer DC contributions	50
Hedging devices used:	
Stock options	
Stock index futures	
Short selling	
Defined contribution asset mix:	
Company stock	4%
Other stock	25%
Fixed income	11%
GICs/BICs	55%
Cash equivalents	5%

SEATTLE — As of Sept. 30, The Boeing Co.'s total employee benefit assets increased 20.8% from a year earlier. Defined benefit assets increased 19.2% during the same period; defined contribution assets increased 22.8%.

Equity managers: Domestic — Alliance; Athene-Coronado; Capital Guardian; Chancellor; Davis Skaggs; First Interstate; IDS: Janus; MAS; Primecap; Provident; RCM; Sirach; Sit; TCW; Tiffany; and Waite & Correnti.

International — Capital Guardian.

Fixed-income managers: Domestic — Alliance; Chancellor; First Interstate; IDS; INVESCO; MAS; McKee; Olympic Capital; Payden & Rygel; PIMCO; Prudential; RCM; Seattle Capital; Sirach; Sit; and TCW.

International — Capital Guardian.

Real estate managers: Aetna and Prudential.

The master trustee and global custodian is Chase. The investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Gary Bland, vice president; Terry Teague, director; and Jim Wadhwani, manager.

Boilermakers-Blacksmiths National Pension Trust

	($ millions)
Total assets	2,834
Defined benefit	2,834
Employer DB contributions	64
Benefit payments	114
Defined benefit asset mix:	
Stocks	45%
Fixed income	36%
Cash equivalents	5%
Real estate equity	8%
Other	6%

KANSAS CITY, Kan. — As of Sept. 30, the Boilermakers-Blacksmiths National Pension Trust's total employee benefit assets increased 18.3% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; Domino; Duff & Phelps; Fiduciary Management; Lazard Freres; Neuberger & Berman; and Shields.

Fixed-income managers: Domestic — Columbia; Duff & Phelps; Financial Counselors; Lehman Ark; Loomis Sayles; and Scudder, Stevens & Clark.

Balanced manager: McMorgan and TCW.

Real estate managers: Copley; Equitable; Karsten; J.P. Morgan; New England; Prudential; John J. Smith.

The master trustee is Brotherhood Bank & Trust; the investment consultant is Callan.

David E. Hanson, financial director, oversees investment management of the fund.

BP America Inc.

	($ millions)
Total assets	2,400
Defined benefit	1,400
Total defined contribution	1,000
Employer DB contributions	60
Benefit payments	110
Employer DC contributions	40
Internally managed assets:	
Total DB	700
Total DC	750
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	70%
Fixed income	25%
Real estate equity	5%
Defined contribution asset mix:	
Company stock	5%

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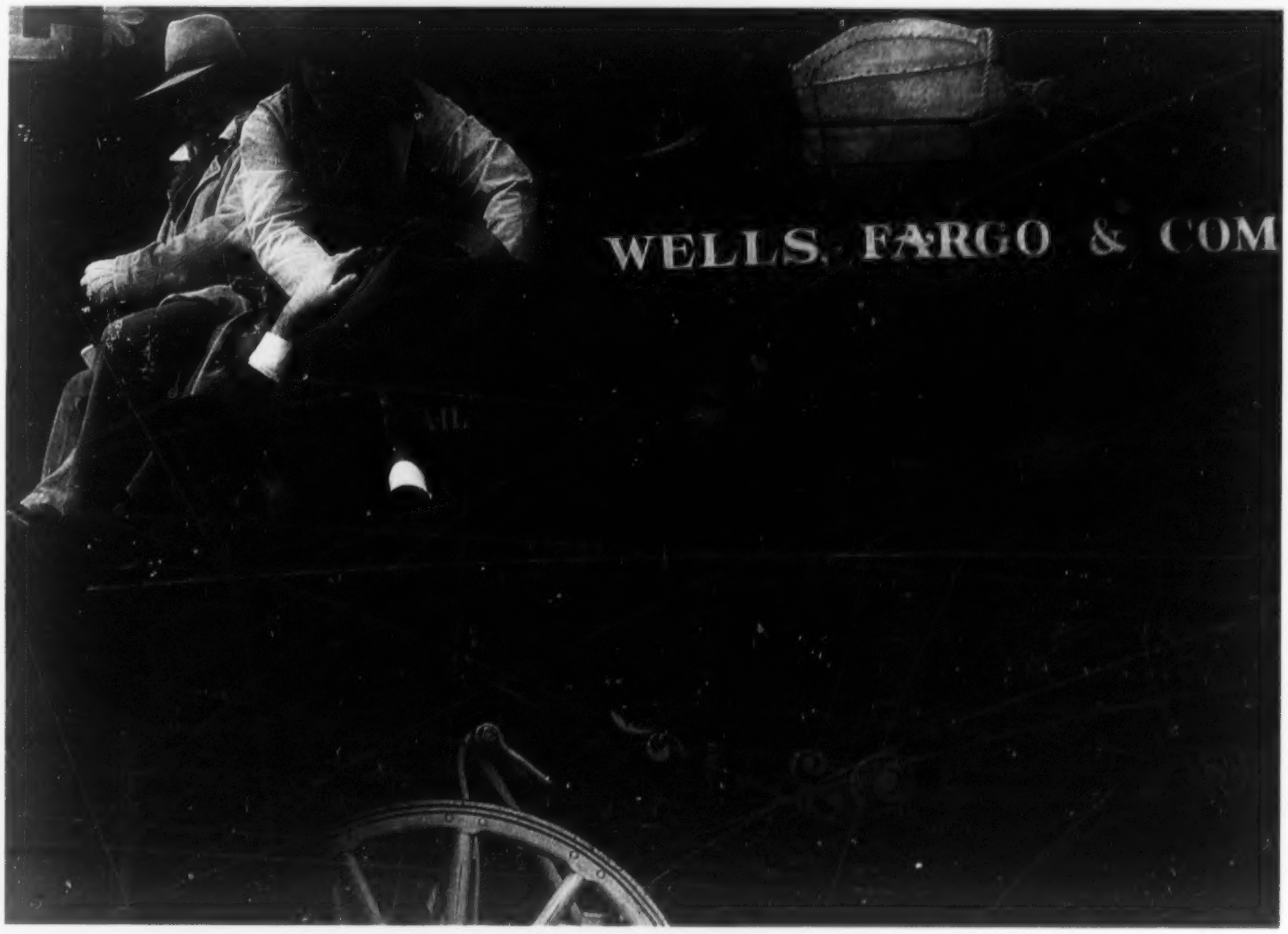

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Other stock	20%
Fixed income	75%

CLEVELAND — As of Sept. 30, BP America Inc.'s total employee benefit assets increased 7.4%. Defined benefit assets increased 9.9% during the same period; defined contribution assets increased 4.1%.

Equity managers: Domestic — Alliance; Hotchkis & Wiley; Mellon; PanAgora; United Capital; and Value Line.

International — Baring and J.P. Morgan.

Fixed-income managers: Domestic — Mellon and J.P. Morgan.

International — J.P. Morgan.

Real estate managers: Aetna; Equitable; First Chicago; and TCW.

Bankers Trust is master trustee and global custodian; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is Howard Harpster, director-pension investments.

Bristol-Myers Squibb Co.

	($ millions)
Total assets*	2,479
Defined benefit	1,359
Total defined contribution	1,120

**P&I estimate*

NEW YORK — As of Sept. 30, *Pensions & Investments* estimated Bristol-Myers Squibb Co.'s total employee benefit assets at $2.479 billion.

C

California Public Employees' Retirement System

	($ millions)
Total assets	64,658
Defined benefit	64,658
Employer DB contributions	1,444
Benefit payments	2,512
Internally managed assets	52,903
Hedging devices used	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	44.6%
Fixed income	37.8%
Cash equivalents	4.9%
Real estate equity	7.7%
Mortgages	4.9%
Other	0.1%

SACRAMENTO, Calif. — As of Sept. 30, California Public Employees' Retirement System's total employee benefit assets increased 19.7% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Amerindo; Boston Co.; Brown Capital; CIC; DFA; First Capital; Oak; Oppenheimer; RCM; Roll and Ross; Spare, Tengler, Kaplan & Bischel; State Street Bank; Systematic; Taplin, Candia & Habacht; TCW; Tiffany Capital; Valenzuela Capital; ValueQuest; WestPort; Denis Wong.

International — Brinson; Fidelity Management; Morgan Grenfell; Nomura; Oeschle; Schroder; State Street Bank; TCW/Cursitor-Eaton; Warburg.

Fixed-income managers: International — Baring; Brinson; Fiduciary Trust; TCW/Cursitor-Eaton; and Warburg.

Real estate managers: Alex. Brown Kleinwort Benson; AMB; Baring; Equitable; Hancock; IBEX; LaSalle; MacFarlane; Metric; Prudential; RREEF; Sentinel; and TCW.

The master custodian is Boston Safe; the global custodians are Boston Safe and State Street. Wilshire is consultant.

Key personnel overseeing the fund are Dale Hanson, executive officer; DeWitt Bowman, chief investment officer; and Kevin Morrill, manager-administrative support.

California State Teachers' Retirement System

	($ millions)
Total assets	37,367
Defined benefit	37,367

Top 200 funds with defined contribution assets in indexed equities and bonds

($ millions)

Fund	Total	Indexed equities	Indexed bonds
TIAA-CREF	27,800	27,800	0
J.C. Penney	1,721	1,721	0
Federal Retirement Thrift	991	751	240
Southwestern Bell	897	853	44
General Electric	681	681	0
Philip Morris	629	629	0
Sears, Roebuck	556	556	0
Ford Motor	550	550	0
AT&T	500	500	0
NYNEX	426	263	163
Tennessee Valley Authority	364	364	0
GTE	338	301	37
Martin Marietta	283	283	0
Evangelical Lutheran Church	246	246	0
United Methodists	223	192	31
TRW	216	216	0
United Parcel Service	212	212	0
Trans World Airlines	205	205	0
Unisys	200	200	0
Honeywell	196	196	0
Minnesota State	193	193	0
ICMA Retirement	186	186	0
Minnesota Mining & Mfg.	184	184	0
U S WEST	175	175	0
Exxon	170	170	0
Pacific Telesis	167	167	0
Aluminum Co. of America	163	163	0
Bechtel Power	151	151	0
Motorola	151	151	0
Deere	134	134	0
ITT	128	128	0
BankAmerica	126	83	43
Cooper Industries	125	125	0
American Electric Power	86	86	0
FPL Group	80	80	0
Westinghouse Electric	74	74	0
General Dynamics	73	73	0
GenCorp	63	63	0
S. California Edison	58	51	7
Georgia-Pacific	56	56	0
Navistar	49	49	0
Metropolitan Life	43	43	0
Travelers	39	39	0
Kaiser Permanente	34	34	0
Raytheon	34	34	0
Eli Lilly	30	30	0
Anheuser-Busch	26	24	2
Delta Air Lines	23	23	0
S. New England Telephone	22	22	0
CIGNA	21	7	14
USX	20	20	0
Southern Co.	19	19	0
Xerox	9	9	0
Halliburton	7	7	0
Tenneco	7	4	3
UMWA	6	6	0
Southern Baptist Convention	4	4	0
New York Life	2	2	0
Total	**40,172**	**39,588**	**584**

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Employer DB contributions	585
Benefit payments	1,026
Internally managed assets	20,301
Hedging devices used	
Stock index futures	
Defined benefit asset mix	
Stocks	40.6%
Fixed income	47%
Cash equivalents	6%
Real estate equity	4.6%
Mortgages	1.8%

SACRAMENTO — As of Sept. 30, the California State Teachers' Retirement System total employee benefit assets increased 24% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Denver Investment; Harris, Bretall, Sullivan and Smith; NCM Capital; Oppenheimer; Provident Investment; Sasco; J & W Seligman; Taplin, Canida and Habacht; TCW; Waddell and Reed; Wells Fargo Nikko; and Wright Investors.

Real estate managers: AMB; Equitable; JMB; O'Connor; and TCW Realty.

Other managers: Abbott Capital.

The master custodian is State Street Bank; the investment consultants are Institutional Property Consultants and Pension Consulting Alliance.

Key personnel overseeing the investment management of the fund are Thomas E. Flanigan, chief investment officer, and Elleen Okada, deputy chief executive officer-investments.

University of California

	($ millions)
Total assets	16,988
Defined benefit	13,992
Total defined contribution	2,996
Other	2,996
Internally managed assets:	
Total DB	13,992
Total DC	2,889
Defined benefit asset mix:	
Stocks	78%
Fixed income	21%
Cash equivalents	1%
Defined contribution asset mix:	
Stock	50%
Fixed income	45%
GICs/BICs	2%
Cash equivalents	3%

OAKLAND, Calif. — As of Sept. 30, the University of California's total employee benefit assets increased 36.2% from a year earlier. Defined benefit assets increased 24.8% during the same period; defined contribution assets — all in a 403(b) plan — increased 138.7%.

The master trustee and global custodian is Security Pacific.

Key personnel overseeing the investment management of the fund are Herbert M. Gordon, treasurer, and Patricia Small, assistant treasurer.

Caterpillar Inc.

	($ millions)
Total assets	4,600
Defined benefit	4,000
Total defined contribution	600
Profit-sharing	7
401(k)	593
Employer DB contributions	0
Benefit payments	180
Employer DC contributions	0
Internally managed assets:	
Total DB	300
Defined benefit asset mix:	
Stocks	69%
Fixed income	25%
Real estate equity	6%
Defined contribution asset mix:	
Company stock	10%
Other stock	39%
GICs/BICs	41%
Cash equivalents	10%

PEORIA, Ill. — As of Sept. 30, Caterpillar Inc.'s total employee benefit assets increased 9%. Defined benefit assets increased 10.5%. Defined contribution assets decreased 0.3%.

Equity managers: Domestic — Delaware; Jennison; Mellon Capital; Oppenheimer; PanAgora; and PRIMECAP.

International — Baring; Globe Finlay; HD International; Mellon Capital; and Mercator.

Fixed-income managers: Domestic — Mellon Capital; J.P. Morgan; PanAgora; and UBS.

Real estate managers: Aetna; Brinson; Equitable; and LaSalle.

The master trustee and global custodian is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Robert C. Frantz, manager-employee benefit funds, and Lisa A. Schlehuber, benefit funds administrator.

Top 200 funds with assets in oil and gas*

Fund	($ millions)
AT&T	181
General Electric	144
GTE	101
Honeywell	58
U S WEST	44
Southwestern Bell	36
S. New England Telephone	32
Exxon	29
Ford Motor	25
Delta Air Lines	22
USX	20
ITT	19
Aluminum Co. of America	15
Caterpillar	9
Xerox (DB)	9
Mass. Teachers/Employees	7
Georgia-Pacific	5
BankAmerica	3
Owens-Illinois	2
Maine State	1
Xerox (DC)	1
Total	**763**

*All assets defined benefit, unless noted.

Chevron Corp.

	($ millions)
Total assets	8,377
Defined benefit	3,983
Profit-sharing/savings	4,394
Employer DB contributions	17
Benefit payments	250
Employer DC contributions	79
Internally managed assets	

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Total DB	400
Hedging devices used:	
Stock options	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	53%
Fixed income	31%
Cash equivalents	5%
Real estate equity	11%
Defined contribution asset mix:	
Company stock	86%
Other stock	3%
GICs	9%
Cash equivalents	2%

SAN FRANCISCO — As of Sept. 30, Chevron Corp.'s total employee benefit assets increased 17% from a year earlier's estimate.

Equity managers: Domestic — Sanford Bernstein; Dodge & Cox; First Pacific; Franklin; Independence; Jennison; Merus; J.P. Morgan; and RCM Capital.

International — State Street Bank and Wells Fargo Nikko.

Fixed-income managers: Domestic — J.P. Morgan; PIMCO; State Street Research; and STW.

Real estate managers: Equitable; Prudential; and RREEF.

Other Managers: Concord Partners; Hellman & Friedman; KKR; Mellon Capital; and Wells Fargo.

The master trustee is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are M.R. Klitten, vice president-finance; D.G. Henderson, assistant comptroller; and N.G. Darling, manager-investment analysis.

Municipal Employees' Annuity & Benefit Fund of Chicago

	($ millions)
Total assets*	2,220
Defined benefit	2,220
Employer DB contributions	125
Benefit payments	143

*as of June 30, 1991

Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	36%
Fixed income	36%
Cash equivalents	23%
Mortgages	2%
Venture capital	3%

CHICAGO — As of June 30, the Municipal Employees' Annuity & Benefit Fund of Chicago's total employee benefit assets increased 7.4% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Ariel; Bankers Trust; Bear Stearns; Brinson; Chicago Asset; Great Lakes; Keeley; Oppenheimer; Weiss, Peck & Greer; Wellington.

International — Frank Russell.

Fixed-income managers: Domestic — Alliance; Bankers Trust; Brinson; Cisneros; Lincoln Capital.

Real estate managers: Birtcher; Capital Associates; Prudential.

Venture capital managers: Chancellor; First Analysis; Mesirow.

The master custodian is Continental Bank; the investment consultant is Becker, Burke.

Key personnel overseeing the investment management of the fund are Wayne N. Marshall, president of the board of trustees; Walter K. Knorr, vice president of the board of trustees; and James L. Stack, acting executive director.

Public School Teachers' Pension and Retirement Fund of Chicago

	($ millions)
Total assets	4,000
Defined benefit	4,000

Internally managed assets:	
Total DB	750

CHICAGO — As of Sept. 30, the Public School Teachers' Pension and Retirement Fund of Chicago's total employee benefit assets increased 10.8% from a year earlier. All assets are defined benefit.

Equity managers: Amerindo; Chicago Corp.; Oppenheimer; RCM; Schroder; Scudder, Stevens; UBS; Waddell & Reed.

Fixed-income managers: CSI; Harris Bank; Morgan Stanley.

The master trustee is Northern Trust through the city treasurer; the investment consultant is Mercer.

The key person overseeing the investment management of the fund is James F. Ward, executive director.

Chrysler Corp.

	($ millions)
Total assets	5,834
Defined benefit	4,660
401(k)	1,174
Employer DB contributions	784
Benefit payments	624
Employer DC contributions	4

Internally managed assets:	
Total DB	1,442
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	36%
Cash equivalents	1%
Real estate equity	3%
Defined contribution asset mix:	
Company stock	6.4%
Other stock	6.2%
GICs/BICs	33.4%
Mutual funds	54%

HIGHLAND PARK, Mich. — As of Sept. 30, Chrysler Corp.'s total employee benefit assets increased 14.5% from a year earlier. Defined benefit assets increased 13% during the same period; defined contribution assets increased 20.5%.

Equity managers: Ariel Capital; Associated Capital; Atalanta Sosnoff; Bank of New York; Bankers Trust; Sanford Bernstein; Columbus Circle; Daiwa International; Deutsche Bank Capital; GE investments; Seth Glickenhaus; Greaves; Hancock Capital Growth; InterMedia Partners; Investment Research; Leavy Investment; Manufacturers National Bank of Detroit; Mitchell Hutchins; NCM Capital; Palley-Needelman; Rothschild International; Fayez Sarofim; Smith Barney, Harris Upham; TCW; Veronis, Suhler.

Fixed-income managers: Aetna Life; Bankers Trust; Bank of New York; Blackstone Short Duration; Metropolitan Realty; Morgan Guaranty; J.P. Morgan Petroleum; Morgan Stanley; National Bank of Detroit; Solon Asset; State Street Research; Travelers; TCW.

Real estate managers: JMB; Prudential; RREEF.

The master trustee and global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are T.J. Osborn, treasurer; T.P. Capo, assistant treasurer; and R.P. Flynn, manager-pension fund investments.

CIGNA Corp.

	($ millions)
Total assets	2,236
Defined benefit	1,369
Total defined contribution	867
Profit-sharing	115
Thrift/savings	641
Other	111
Employer DB contributions	43
Benefit payments	58
Employer DC contributions	42

Internally managed assets:	
Total DB	1,369
Total DC	734
Defined benefit asset mix:	
Stocks	54.9%
Fixed income	38.1%
Cash equivalents	0.5%
Real estate equity	6.5%
Defined contribution asset mix:	
Company stock	5.8%
GICs/BICs	81.5%
Other	12.7%

PHILADELPHIA — As of Sept. 30, CIGNA Corp.'s total employee benefit assets increased 30.7% from a year earlier. Defined benefit assets increased 23.7% during the same period; defined contribution assets increased 43.5%.

All assets are managed by CIGNA

Time Machine

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affiliates except for a small amount in real estate managed by Coldwell Banker.

The master trustee is CG Trust Co.; the investment consultant is Connecticut General Pension Services Inc.

Key personnel overseeing the investment management of the fund are James Stewart and George R. Trumbull, executive vice presidents and chief financial officers.

Citibank N.A.

	($ millions)
Total assets	2,477
Defined benefit	1,757
401(k)	720
Employer DB contributions	0
Employer DC contributions	91
Internally managed assets:	
Total DB	137
Total DC	641
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	76.1%
Fixed income	9.7%
Cash equivalents	9%
Real estate equity	4.9%
Mortgages	0.3%
Defined contribution asset mix:	
Company stock	16.9%
Other stock	23.3%
Fixed income	13.3%
Cash equivalents	46.5%

NEW YORK — As of Sept. 30, Citibank N.A.'s total employee benefit assets increased 23.5% from a year earlier. Defined benefit assets increased 35.2% during the same period; defined contribution assets increased 1.8%.

Equity manager: Domestic — Chancellor.

Fixed-income managers: Domestic — Chancellor.

The master trustee is Citibank.

The key person overseeing the investment management of the fund is Ronald Walter, vice president.

Colorado Public Employees' Retirement Association

	($ millions)
Total assets	10,914
Defined benefit	10,914
Employer DB contributions	341
Benefit payments	361
Internally managed assets	7,780
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	47.4%
Fixed income	34.9%
Cash equivalents	3.3%
Real estate equity	4.5%
GICs/BICs	4.5%
Mortgages	3.7%
Other	1.7%

DENVER — As of Sept. 30, The Colorado Public Employees' Retirement Association's total employee benefit assets increased 18.7% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Denver Investment; Janus; United Capital.

International — Alliance; Baring International; Brinson; Dunedin; Morgan Grenfell; Nomura; Philippe; Schroder.

Fixed-income managers: Domestic — Fischer Francis Trees & Watts; LM Capital; NCM Capital.

International — Julius Baer.

Real estate managers: Heitman; LaSalle; Prudential.

Venture capital/LBO managers: Cattanch; Centennial Fund; Columbine Fund; Colorado Venture Management; Equitable Capital; Hancock; Shearson Lehman Merchant Banking Fund.

The master custodian and global custodian is Northern Trust; the investment consultant is William A. Mercer.

The key person overseeing the investment management of the fund is Norman Benedict, deputy executive director of investments.

Commonwealth Edison Co.

	($ millions)
Total assets	2,379
Defined benefit	2,379
Internally managed assets	1,338
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	53%
Fixed income	44%
Cash equivalents	3%

CHICAGO — As of Sept. 30, Commonwealth Edison Co.'s total employee benefit assets increased 17.2% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — ANB; Bankers Trust; Boston Safe; J.P. Morgan; Wells Fargo.

The master custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Howard R. Carlson, manager of investments; Rickard P. Schwartz, senior portfolio manager; and Michael J. Borrelli, equity portfolio manager.

The State of Connecticut Trust Funds

	($ millions)
Total assets	9,360
Defined benefit	9,360
Employer DB contributions	366
Benefit payments	527
Internally managed assets	1,235
Defined benefit asset mix:	
Stocks	49%
Fixed income	30%
Cash equivalents	4%
Real estate equity	14%
Mortgages	3%

HARTFORD, Conn. — As of Sept. 30, the State of Connecticut Trust Funds' total employee benefit assets increased 18.5% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Aetna; Atalanta-Sosnoff; Ariel; Bankers Trust; Capital Guardian; Connecticut National; Franklin Portfolio; Independence; Oppenheimer; Phoenix; Roll and Ross; State Street Research; Wellington; and Wright.

International — Boston International; Capital Guardian; DFA; Nomura; Parametric; Philippe; and Schroder.

Fixed-income managers: Domestic — Bear Stearns; Loomis Sayles; PIMCO; Standish Ayer; and STW.

International — Julius Baer; Brinson; Smith Barney; and State Street Bank.

Real estate managers: Aetna; AEW; CIGNA; Copley; Hart; Heitman; JMB; LaSalle; J.P. Morgan; Phoenix; PSI; RREEF; Sentinel; State Street Bank; and TCW.

Venture capital manager: Bigler Crossroads.

The master trustee and global custodian is Boston Safe Deposit; the investment consultants are TPF&C (domestic) and Pension Consulting Alliance (international and real estate).

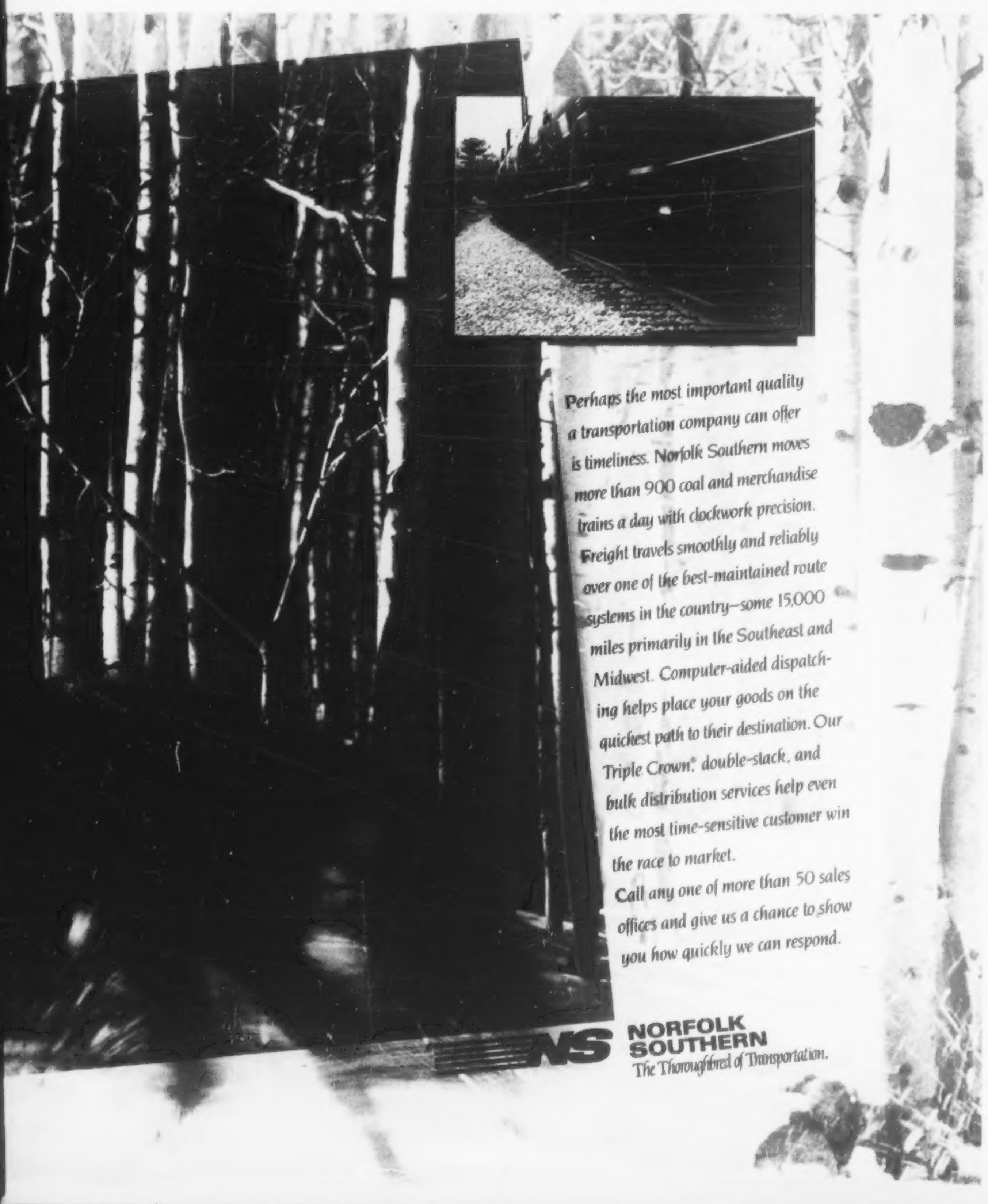
Key personnel overseeing the investment management of the fund are Frank P. McDermott, chief investment officer and assistant treasurer; Sylvia Ferrell-Jones, senior investment officer-real estate; and John C. Winchester, senior investment officer-pension analysis.

Consolidated Edison Co. of New York Inc.

	($ millions)
Total assets	3,850
Defined benefit	3,450
401(k)	400
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

NEW YORK — As of Sept. 30, Consolidated Edison Co. of New York Inc.'s total employee benefit assets increased 18.2% from a year earlier. Defined benefit assets increased 19.7% during the same period; defined contribution assets increased 7%.

Money managers: Batterymarch; Boston Co.; Chancellor; Equitable Life, Iowa; First Manhattan; JMB; WR Lazard; Mellon Capital; Metropolitan Life; J.P. Morgan; PanAgora, Prudential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Asset; Putnam; State Street Research; Travelers; and Wells Fargo Nikko.

The master trustee and global custodian is State Street Bank; the investment consultant is Evaluation Associates.

The key person overseeing the investment management of the fund is John N. Bell, assistant treasurer.

Cooper Industries Inc.

	($ millions)
Total assets	1,975
Defined benefit	930
Total defined contribution	1,045
401(k)	860
Thrift/savings	25
Money purchase	160
Defined benefit asset mix:	
Stocks	28%
Cash equivalents	72%
Defined contribution asset mix:	
Company stock	37%
Other stock	13%
GICs/BICs	46%
Cash equivalents	2%
Loans	2%

HOUSTON — As of Sept. 30, Cooper Industries Inc.'s total employee benefit assets increased 13.5% from a year earlier. Defined benefit assets increased 1.1% during the same period; defined contribution assets increased 27.4%.

Equity manager: Domestic — Mellon Capital.

The master custodian is Citibank.

The key person overseeing the investment management of the fund is Dwight S. Kadar, director.

D

Deere & Co.

	($ millions)
Total assets	3,069
Defined benefit	2,655
401(k)	414
Employer DB contributions	171
Benefit payments	190
Employer DC contributions	14
Internally managed assets:	
Total DB	1,941
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	72.7%
Fixed income	20.6%
Cash equivalents	2.3%
Real estate equity	2.6%
Venture capital	1.8%
Defined contribution asset mix:	
Company stock	6.6%
Fixed income	0.5%
GICs/BICs	67.6%
Other	25.3%

MOLINE, Ill. — As of Sept. 30, Deere & Co.'s total employee benefit assets increased 25.3% from a year earlier. Defined benefit assets increased 23.8% during the same period; defined contribution assets increased 35.3%.

Equity managers: Domestic — Batterymarch; DFA; Jacobs/Levy; Morgan Guaranty; and Roll and Ross.

International — Acadian; Batterymarch; DFA; Roll and Ross; and Wells Fargo Nikko.

Real estate managers: AEW; Copley; LaSalle; Morgan Guaranty; and TCW.

The master trustee and global custodian is Boston Safe.

They key person overseeing the investment management of the fund is D.R. Schwartz, managing director-investments.

Delta Air Lines Inc.

	($ millions)
Total assets	5,139
Defined benefit	4,110
Total defined contribution	1,029
401(k)	75
Thrift/savings	894
ESOP	60
Employer DB contributions	188
Benefit payments	108
Employer DC contributions	36
Internally managed assets:	
Total DB	536
Defined benefit asset mix:	
Stocks	61%
Fixed income	22%

Top 200 funds with defined benefit assets managed internally

($ millions)

Fund	Total	Equities	Bonds	Short-term	Real estate equity	Mortgages	Foreign equities	Foreign bonds	Foreign cash	Other
California Employees	52,903	17,978	25,021	1,523	5,073	3,307	0	0	0	1
New York State & Local	38,271	18,246	18,940	1,085	0	0	0	0	0	0
New Jersey	31,000	15,400	14,250	600	0	0	0	750	0	0
New York State Teachers	29,619	16,427	9,766	703	6	1,916	739	0	0	62
Texas Teachers	29,477	13,000	13,025	562	430	1,810	650	0	0	0
Ohio Employees	23,267	4,976	14,615	3,656	0	0	0	0	0	20
General Electric	22,245	9,643	7,215	491	1,753	400	945	0	0	1,798
Wisconsin State	21,179	10,888	5,410	389	683	151	0	0	0	3,658
California State Teachers	20,301	0	17,409	2,220	0	672	0	0	0	0
Ohio Teachers	20,200	6,969	9,252	577	2,056	1,324	0	0	0	22
State of Michigan	18,910	6,755	6,188	3,959	900	1,006	0	0	0	102
Florida State Board	14,526	6,050	8,254	166	56	0	0	0	0	0
North Carolina	14,051	0	13,986	65	0	0	0	0	0	0
University of California	13,992	10,936	2,789	0	0	0	49	218	0	0
Du Pont	13,024	7,319	3,563	857	0	0	862	423	0	0
Tennessee Consolidated	9,968	3,369	4,313	553	0	1	344	288	0	1,100
Alabama Retirement	9,920	752	5,692	1,146	60	2,111	152	0	0	7
United Nations	9,798	2,011	1,361	188	911	0	2,485	2,473	369	0
USX	9,420	5,070	2,760	890	250	30	240	160	0	20
South Carolina	9,386	0	8,702	684	0	0	0	0	0	0
Maryland State	8,100	1,200	6,700	200	0	0	0	0	0	0
Georgia Teachers	7,866	540	6,838	475	3	10	0	0	0	0
Colorado Employees	7,780	3,783	3,527	103	56	311	0	0	0	0
Texas Employees	7,683	2,245	5,363	75	0	0	0	0	0	0
Minnesota State	6,224	560	5,664	0	0	0	0	0	0	0
Washington State Board	6,082	44	5,107	931	0	0	0	0	0	0
Prudential Insurance	4,926	1,783	1,270	463	569	0	480	332	29	0
Oregon Employes	3,820	0	2,340	0	238	640	0	190	0	412
Mass. Teachers/Employees	3,338	610	2,346	382	0	0	0	0	0	0
Bethlehem Steel	3,295	1,097	1,980	218	0	0	0	0	0	0
General Dynamics	3,037	577	2,460	0	0	0	0	0	0	0
Pennsylvania Public Schools	3,000	na	na	na	na	na	na	na	na	na
AT&T	2,979	0	0	0	1,546	0	0	0	0	1,433
GTE	2,822	883	1,939	0	0	0	0	0	0	0
Utah State	2,700	950	1,650	0	100	0	0	0	0	0
Metropolitan Life	2,608	na	na	na	na	na	na	na	na	na
San Francisco City & County	2,464	764	1,700	0	0	0	0	0	0	0
New Mexico Educational	2,426	410	1,916	73	0	0	27	0	0	0
Union Carbide	2,404	812	1,362	46	154	0	0	0	0	30
Sears, Roebuck	2,383	1,541	719	20	0	0	0	0	0	103
Grumman	2,314	841	1,018	455	0	0	0	0	0	0
Alaska State	2,300	0	2,300	0	0	0	0	0	0	0
Ohio Police & Fire	2,244	0	2,002	242	0	0	0	0	0	0
Montana Board	1,995	442	1,279	135	0	119	0	0	0	20
Aetna Life	1,950	1,305	131	6	84	20	89	0	0	315
Deere	1,941	1,382	559	0	0	0	0	0	0	0
Ohio School Employees	1,896	281	772	94	35	27	0	0	0	687
NYNEX	1,894	1,173	721	0	0	0	0	0	0	0
Kentucky Teachers	1,783	220	657	764	37	105	0	0	0	0
U S WEST	1,758	1,121	637	0	0	0	0	0	0	0
Kentucky Retirement	1,737	1,200	0	517	0	0	0	0	0	20
Westinghouse Electric	1,622	334	567	119	0	0	0	0	0	602
Travelers	1,621	518	87	7	55	0	323	29	0	602
Atlantic Richfield	1,618	1,017	262	79	0	0	240	0	0	20
Allied-Signal	1,500	na	na	na	na	na	na	na	na	na
Ford Motor	1,500	0	1,500	0	0	0	0	0	0	0
Chrysler	1,442	1,034	408	0	0	0	0	0	0	0
Illinois State	1,405	0	1,293	112	0	0	0	0	0	0
CIGNA	1,368	604	225	7	90	0	147	36	0	259
Commonwealth Edison	1,338	214	1,041	83	0	0	0	0	0	0
Connecticut Trust	1,235	0	895	340	0	0	0	0	0	0
New York City	1,121	0	0	871	0	250	0	0	0	0
Martin Marietta	1,061	217	201	643	0	0	0	0	0	0
New York Life	970	0	970	0	0	0	0	0	0	0
Hawaii State	898	30	101	52	379	336	0	0	0	0
Exxon	858	843	0	15	0	0	0	0	0	0
Nat'l Rural Electric Co-op	826	428	274	124	0	0	0	0	0	0
Chicago Public Schools	750	na	na	na	na	na	na	na	na	na
Virginia	718	718	0	0	0	0	0	0	0	0
BP America	700	na	na	na	na	na	na	na	na	na
UMWA	695	0	545	150	0	0	0	0	0	0
Digital Equipment	540	na	na	na	na	na	na	na	na	na
Delta Air Lines	536	251	267	0	0	18	0	0	0	0
Trans World Airlines	499	422	52	25	0	0	0	0	0	0
Louisiana Employees	447	0	438	9	0	0	0	0	0	0
Louisiana Teachers	429	0	0	429	0	0	0	0	0	0
Chevron	400	296	0	104	0	0	0	0	0	0
Los Angeles City	400	0	0	400	0	0	0	0	0	0
K mart	344	0	293	51	0	0	0	0	0	0
Caterpillar	300	300	0	0	0	0	0	0	0	0
Oklahoma Teachers	272	104	0	0	0	0	0	0	0	168
Pacific Telesis	190	na	na	na	na	na	na	na	na	na
Los Angeles Water & Power	149	0	0	149	0	0	0	0	0	0
Bakery & Confectionery	148	0	0	0	24	124	0	0	0	0
TRW	142	130	0	12	0	0	0	0	0	0
S. California Edison	137	137	0	0	0	0	0	0	0	0
Citibank	136	0	0	0	87	5	40	0	4	0
Owens-Illinois	135	135	0	0	0	0	0	0	0	0
Illinois Municipal	132	0	0	132	0	0	0	0	0	0
Texaco	120	na	na	na	na	na	na	na	na	na
Hewlett-Packard	116	na	na	na	na	na	na	na	na	na
Missouri State	111	0	0	0	88	23	0	0	0	0
New Mexico Employees	110	0	91	13	6	0	0	0	0	0
Los Angeles Fire & Police	108	0	0	108	0	0	0	0	0	0
United Methodists	108	na	na	na	na	na	na	na	na	na
United Parcel Service	97	na	na	na	na	na	na	na	na	na
Central States Teamsters	73	0	0	67	0	0	0	0	0	6
Monsanto	67	0	67	0	0	0	0	0	0	0
Iowa Employees	57	0	0	57	0	0	0	0	0	0
American Airlines	45	0	0	45	0	0	0	0	0	0
Arkansas Teachers	43	na	na	na	na	na	na	na	na	na
Rhode Island Employees	31	0	31	0	0	0	0	0	0	0
Minnesota Mining & Mfg.	26	0	0	0	0	0	0	25	0	1
Southern Baptist Convention	26	0	0	0	10	16	0	0	0	0
Illinois Universities	20	20	0	0	0	0	0	0	0	0
BankAmerica	16	0	0	16	0	0	0	0	0	0
Georgia-Pacific	16	0	16	0	0	0	0	0	0	0
S. California UFCW	8	0	0	8	0	0	0	0	0	0
Total	**540,906**	**189,305**	**285,082**	**20,740**	**15,730**	**14,732**	**7,812**	**4,924**	**402**	**11,468**

Cash equivalents	8%
Real estate equity	3%
Mortgages	2%
Other	4%
Defined contribution asset mix	
Company stock	16%
Other stock	17%
Fixed income	10%
GICs/BICs	57%

ATLANTA — As of Sept. 30, Delta Air Lines Inc.'s total employee benefit assets increased 29.2% from a year earlier. Defined benefit assets increased 29.4% during the same period; defined contribution assets increased 28.3%.

The master trustee and global custodian is Harris Trust.

The key person overseeing the investment management of the fund is James B. Taylor, assistant vice president-investment management.

City of Detroit Retirement Systems

	($ millions)
Total assets*	4,010
Employer DB contributions	129
Benefit payments	205
Employer DC contributions	0

**as of June 30, 1991*

DETROIT — As of June 30, total employee benefit assets of the City of Detroit Retirement Systems increased 2.2% from the amount estimated as of Sept. 30, 1990.

The data above reflect the combined General Retirement and Police & Fire Retirement systems.

General system managers: AFA; Ariel; Boston Co.; Comerica-Detroit; Fiduciary Management; Loomis, Sayles; Marquette Capital; Mortgage Investors Group; Munder; NCM; Oppenheimer; Scudder, Stevens & Clark; and Shields.

Police & Fire system managers: Athene Coronado; ACORN; AFA; Ariel; Bankers Trust; Barnett Banks; Income, Research and Management; Loomis, Sayles; Marquette; Mortgage Investors Group; Munder; North Carolina Mutual; Oppenheimer; Putnam; and State Street Research.

The master custodian is Comerica Bank-Detroit.

Key personnel overseeing the investment management are Thomas Zdrodowski, executive secretary; Joseph Glanton, assistant executive secretary; Nicholas Degel, assistant executive secretary; and Walter Stampor, investment agent.

Digital Equipment Corp.

	($ millions)
Total assets	2,018
Defined benefit	1,585
401(k)	433
Employer DB contributions	0
Benefit payments	35
Employer DC contributions	0
Internally managed assets:	
Total DB	540

MAYNARD, Mass. — As of Sept. 30, Digital Equipment Corp.'s total employee benefit assets increased 22.2% from a year earlier. Defined benefit assets increased 17.8% during the same period; defined contribution assets increased 41%.

Equity managers: Domestic — Alliance; Bankers Trust; Capital Guardian; First Quadrant; and Wells Fargo Nikko.

International — Boston International and Capital Guardian.

Fixed-income managers: Domestic — Jennison and PIMCO.

Real estate manager: AEW.

The master trustee is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund are A. Raymond Schmalz, group treasury manager, and John W. Cutler Jr., manager-pension investment analysis.

The Dow Chemical Co.

	($ millions)
Total assets*	4,594
Defined benefit	2,871
Total defined contribution	1,723
Employer DB contributions	80

**P&I estimate*

MIDLAND, Mich. — As of Sept. 30, The Dow Chemical Co.'s total employee benefit assets increased an estimated 14.9% from a year earlier. Defined benefit assets increased an estimated 14.8% during the same period; defined contribution assets increased an estimated 14.9%.

Key personnel overseeing the investment management of the fund are W. Jerry Burroughs, director-portfolio management; Richard C. Cross, senior portfolio manager-fixed income and real estate; and W.H. Falk, operations manager.

E.I. du Pont de Nemours

	($ millions)
Total assets	20,501
Defined benefit	13,286
Total defined contribution	7,215
401(k)	252
Thrift/savings	6,607
ESOP	206
Other	150
Employer DB contributions	0

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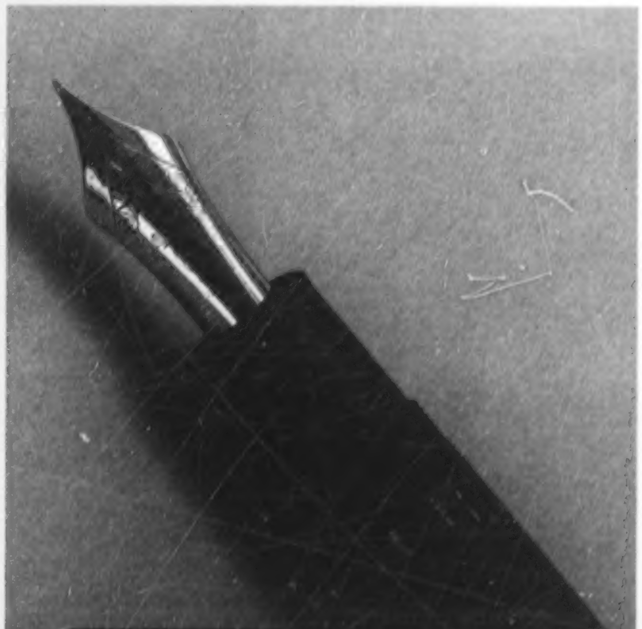

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Benefit payments	714
Internally managed assets:	
Total DB	13,024
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	62%
Fixed income	30%
Cash equivalents	7%
Real estate equity	1%

WILMINGTON, Del. — As of Sept. 30, E.I. du Pont de Nemours & Co.'s total employee benefit assets increased 15.6% from a year earlier. Defined benefit assets increased 16.1% during the same period; defined contribution assets increased 14.9%.

Real estate managers: Trammell Crow; EQK Realty; John Hancock; Lincoln Property; J.P. Morgan; and NCNB Texas.

Venture capital managers: APA; Capital Management Services; Crossroads; Golder, Thoma & Cressey; Hambrecht & Quist; Horsley Keogh; Pathfinder; Paul Capital; T. Rowe Price; Robertson Coleman & Stephens; and Warburg, Pincus.

Corporate finance managers: Citicorp Mezzanine; Foothill Partners; Water Street.

The master trustee is Wilmington Trust; the global custodian is Bankers Trust.

The key person overseeing the investment management of the fund is Edward J. Bassett, vice president-Du Pont pension fund investment.

The 1992 directory of investment advisers — featuring profiles of money managers — will be published in the May 18 issue of *Pensions & Investments*.

E

Eastman Kodak Co.

	($ millions)
Total assets*	9,961
Defined benefit	7,279
401(k)	2,682
Employer DB contributions	5
Benefit payments	360
Employer DC contributions	151

*P&I estimate

Internally managed assets:	
Total DC	2,252
Defined benefit asset mix:	
Stocks	71%
Fixed income	6%
Cash equivalents	3%
Alternative investments	20%
Defined contribution asset mix:	
Company stock	11%
Other stock	5%
GICs/BICs	84%

ROCHESTER, N.Y. — *Pensions & Investments* estimates Eastman Kodak Co.'s total assets were $9.961 billion as of Sept. 30. That estimate is based on total employee benefit assets of $8.913 billion reported by the company as of Dec. 31, 1990. Using Kodak's own numbers, employee benefit assets decreased 3.7% in the year ended Dec. 31, 1990.

The master trustee and global custodian is Boston Safe; the investment consultant is Rogers, Casey.

The key person overseeing the investment management of the fund is Russell L. Olson, director of pension investments.

The Church Pension Fund (Episcopal)

	($ millions)
Total assets	1,963
Defined benefit	1,963
Employer DB contributions	55
Benefit payments	58
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	59%
Fixed income	31%
Cash equivalents	2%
Private placements	8%

NEW YORK — As of Sept. 30, total employee benefit assets of The Church Pension Fund (Episcopal) increased 6.1% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance and J.P. Morgan.

International — J.P. Morgan.

Fixed-income managers: Domestic — Alliance and J.P. Morgan.

International — J.P. Morgan.

The master custodians are Morgan Guaranty and J.P. Morgan.

Key personnel overseeing the investment management of the fund are Alan F. Blanchard, president, and Mort Fearey, senior financial officer.

Evangelical Lutheran Church in America Board of Pensions

	($ millions)
Total assets	2,223
403(b)	2,223
Employer DC contributions	37
Internally managed assets	1,333
Hedging devices used:	
Stock index futures	
Defined contribution asset mix:	
Stock	41.8%
Fixed income	54.8%
Cash equivalents	3.1%
Other	0.3%

MINNEAPOLIS — As of Sept. 30, the Evangelical Lutheran Church in America Board of Pensions' total employee benefit assets increased 21.3% from a year earlier. All assets are defined contribution.

Equity managers: Domestic — Alliance; J.P. Morgan; RCM; Rosenberg Institutional; and Wells Fargo Nikko.

International — Acadian.

Fixed-income managers: Domestic — London Investment.

International — J.P. Morgan.

High-yield manager: Pacholder Associates.

The master trustee and global custodian is Boston Safe Deposit & Trust;

Top 200 funds with assets in dedicated/immunized bonds

Defined benefit

Fund	($ millions)
Western Teamsters	5,939
Maryland State	5,800
Minnesota State	5,482
U S WEST	2,427
Southwestern Bell	1,994
Navistar	1,932
Aluminum Co. of America	1,585
American Airlines	1,240
Prudential Insurance	914
Caterpillar	906
Ohio Teachers	760
Florida State	748
Tennessee Valley Authority	583
Raytheon	577
Deere	559
Inland Steel	537
GenCorp	531
Nevada Employees	514
PPG Industries	454
Hospital/Healthcare	397
Nat'l Rural Electric Co-op	280
Phillips Petroleum	277
Johnson & Johnson	100
United Methodists	91
Central States Teamsters	90
Boilermakers-Blacksmiths	83
S. New England Telephone	78
Procter & Gamble	66
Total	**34,944**

Defined contribution

Fund	($ millions)
United Methodists	112
Tennessee Valley Authority	111
USX	40
New York Life	12
Total	**275**

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the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are John G. Kapanke, president; Michael L. Troutman, senior manager-investment programs; Paul "Tim" Kaspar, senior equity portfolio manager; and Christopher C. Berberet, senior bond portfolio manager.

Exxon Corp.

	($ millions)
Total assets	8,919
Defined benefit	3,597
Total defined contribution	5,322
401(k)	742
Thrift/savings	3,815
ESOP	765
Employer DB contributions	0
Benefit payments	350
Employer DC contributions	110
Internally managed assets	
Total DB	858
Total DC	2,862
Hedging devices used	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	59%
Fixed income	26%
Real estate equity	10%
Other	5%
Defined contribution asset mix	
Company stock	43%
Other stock	3%
Cash equivalents	54%

IRVING, Texas — As of Sept. 30, Exxon Corp.'s total employee benefit assets increased 13.8% from a year earlier. Defined benefit assets increased 11.5% during the same period; defined contribution assets increased 15.4%.

Equity managers: Domestic — Bernstein; Geometry Asset; and Wells Fargo Nikko.

International — Aetna and Wells Fargo Nikko.

Fixed-income managers: Domestic — J.P. Morgan; Prudential; Smith Barney; UBS Asset; and Wells Fargo Nikko.

Real estate managers: Aetna; CPI; Equitable; Grubb & Ellis; NCNB Texas; and Prentiss Properties.

Insured reserves managers: Equitable; John Hancock; and Travelers.

Venture capital manager: Horsley Keogh.

Royalties managers: First City Texas and Premier Bancorp.

The master trustee is The Bank of New York; Chase Manhattan and Morgan Stanley provide global custody indirectly.

Key personnel overseeing the investment management of the fund are W. Allen Harrison, assistant treasurer; J.E. Bayne, manager-benefits finance and investment; and Daniel L. Dollo, senior financial coordinator.

F

Federal Retirement Thrift Investment Board

	($ millions)
Total assets	10,198
Thrift/savings	10,198
Employer DC contributions	771
Internally managed assets	9,207
Defined contribution asset mix	
Stock	7.4%
Fixed income	2.3%
Cash equivalents	90.3%

WASHINGTON — As of Sept. 30, the Federal Retirement Thrift Investment Board's total employee benefit assets increased 48% from a year earlier. All assets are defined contribution.

Equity manager: Domestic — Wells Fargo Nikko.

Fixed-income manager: Domestic — Wells Fargo Nikko.

The master custodians are Wells Fargo Institutional Trust and the U.S. Treasury Department.

Key personnel overseeing the investment management of the fund are Peter B. Mackey, director-investments; Alison L. Doone, deputy director-investments; and Patricia A. Snodgrass, senior financial analyst.

Florida State Board of Administration

	($ millions)
Total assets	25,517
Defined benefit	25,517
Employer DB contributions	2,168
Benefit payments	809
Internally managed assets	14,526
Hedging devices used	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	51%
Fixed income	45%
Cash equivalents	1%
Real estate equity	3%

TALLAHASSEE, Fla. — As of Sept. 30, the Florida State Board of Administration's total employee benefit assets increased 32.4% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alli-

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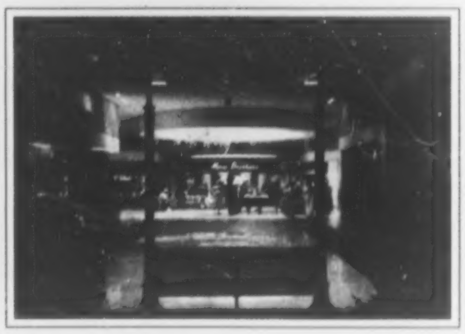

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ance; Ariel; Barnett Banks; Barrow, Hanley, Mewhinney & Strauss; Denver Investment; Eagle; IDS Growth; Lazard Freres; Corporate Advisors; Newbold's; Prudential Asset; Sun Bank; Westwood; Wilshire; and Wells Fargo Nikko.

International — Bankers Trust; Baring; Capital Guardian; CIGNA Investments; Fidelity Management; J.P. Morgan; Kleinwort Benson; Morgan Stanley; Scudder; SBC; T. Rowe Price; and Templeton.

Fixed-income managers: Domestic — Alliance; APAM; Bear Stearns; First Boston; Glenmede; and TCW.

Real estate managers: Aetna; Brinson; CFCL; Equitable; Goldman, Sachs; John Hancock; JMB; LaSalle; Lehndorff & Babson; and Prudential.

Citibank, Wells Fargo and Northern Trust are master custodians; Citibank is global custodian. The investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Ash Williams, executive director; William O. Bell, chief of management policy; Lan Janecek, chief investment officer of equities; Carmen Hiers, chief investment officer of fixed income; and Doug Bennett, chief investment officer of real estate.

Ford Motor Co.

	($ millions)
Total assets	22,700
Defined benefit	18,800
Total defined contribution	3,900
Other	3,900
Employer DB contributions	0
Benefit payments	900
Employer DC contributions	25
Internally managed assets:	
Total DB	1,500
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	58%
Fixed income	29%
Cash equivalents	8%
Real estate equity	5%
Defined contribution asset mix:	
Company stock	47%
Other stock	14%
GICs/BICs	26%
Cash equivalents	10%
Loans	3%

DEARBORN, Mich. — As of Sept. 30, Ford Motor Co.'s total employee benefit assets increased 9.1% from a year earlier. Defined benefit assets increased 11.2%; defined contribution assets stayed the same.

Equity managers: Alliance; Ariel; Sanford Bernstein; Brinson; Capital Guardian; Dreman; Fidelity Management; Manufacturers Detroit; Mitchell Hutchins; J.P. Morgan; PRIMECAP; Sarofim; Scudder, Stevens & Clark; and State Street Research.

Fixed-income managers: Capital Guardian; J.P. Morgan; T. Rowe Price; Sarofim; State Street Research; and Wells Fargo.

Real estate managers: Aetna; Cabot, Cabot & Forbes; CIGNA; Copley; Equitable; GE; JMB; LaSalle; Lehndorff & Babson; J.P. Morgan; NCNB; Prudential; PSI; Sentinel; and TCW.

The master trustee is Manufacturers National Bank of Detroit.

Key personnel overseeing the investment management of the fund are M.E. Maertens, director-trust investments; P.E. Sharp, assistant treasurer; and S.E. Weiner, supervisor investment analysis.

FPL Group Inc.

	($ millions)
Total assets	2,227
Defined benefit	1,460
Total defined contribution	767
Thrift/savings	664
ESOP	103
Employer DB contributions	0
Hedging devices used:	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	62%
Fixed income	26%
Real estate equity	7%
Other	5%
Defined contribution asset mix:	
Company stock	52%
Other stock	12%
GICs/BICs	33%
Other	3%

NORTH PALM BEACH, Fla. — As of Sept. 30, FPL Group Inc.'s total employee benefit assets increased 22.2% from a year earlier. Defined benefit assets increased 17% during the same period; defined contribution assets increased 33.4%.

Equity managers: Domestic — Babson; Capital Technology; General American; Quest Advisory; Sarofim; Donald Smith; and Wells Fargo Nikko.

International — Hill Samuel; Oechsle; and State Street International.

Fixed-income managers: Domestic — Wells Fargo Nikko and Western.

Real estate managers: AMB; JMB; and RREEF.

The master trustee and global custodian is Mellon Bank; the investment consultant is Rogers Casey.

The key person overseeing the investment management of the fund is Robert L. McGrath, director-trust fund investments.

G

GenCorp

	($ millions)
Total assets	1,866
Defined benefit	1,531
401(k)	335
Employer DB contributions	0
Benefit payments	72
Employer DC contributions	14
Defined benefit asset mix	
Stocks	54%
Fixed income	43%
Real estate equity	3%
Defined contribution asset mix	
Company stock	22%
Other stock	19%
GICs/BICs	59%

FAIRLAWN, Ohio — As of Sept. 30, GenCorp's total employee benefit assets increased 17.9% from a year earlier. Defined benefit assets increased 16.8% during the same period; defined contribution assets increased 23.2%.

Equity managers: Domestic — Ardsley Partners; Bankers Trust; Cadence; J.P. Morgan; Morgan Stanley; and Wilshire.

International — Bankers Trust and J.P. Morgan International.

Fixed-income managers: Domestic — ASB Capital and Lincoln Capital.

International — Bankers Trust.

Real estate manager: First Management Group.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are Dave McNiff, director; Sina Baldwin, manager; and Rita Schafer, analyst.

General Dynamics Corp.

	($ millions)
Total assets	7,234
Defined benefit	4,693
401(k)	2,541
Employer DB contributions	40
Benefit payments	130
Employer DC contributions	60
Internally managed assets	
Total DB	3,037
Total DC	231
Hedging devices used	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	33%
Fixed income	60%
Cash equivalents	3%
GICs/BICs	4%
Defined contribution asset mix	
Company stock	10%
Other stock	12%
Fixed income	14%
GICs/BICs	64%

ST. LOUIS — As of Sept. 30, General Dynamics Corp.'s total employee benefit assets increased 19.2% from a year earlier. Defined benefit assets increased 21.3% during the same period; defined contribution assets increased 15.5%.

Money managers: Alliance; Boatmen's; Delaware Investment; GE; ISI; Jennison; Henry Kaufman; Lazard Freres; Lincoln Capital; Miller, Anderson & Sherrerd; J.P. Morgan; Rosenberg Institutional; Sasco; and Wells Fargo Nikko.

The master trustee and global custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Charles Walbrandt, vice president-trust investment operation; and R.J. Roesch, corporate manager-trust investment operation.

General Electric Co.

	($ millions)
Total assets	31,078
Defined benefit	25,302
401(k)	5,776
Employer DB contributions	2
Benefit payments	1,104
Employer DC contributions	613
Internally managed assets	
Total DB	22,245
Total DC	5,776
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	51%
Fixed income	31%
Cash equivalents	2%
Real estate equity	7%
GICs/BICs	1%
Mortgages	1%
Other	7%
Defined contribution asset mix:	
Fixed income	98%
GICs/BICs	1%
Cash equivalents	1%

STAMFORD, Conn. — As of Sept. 30, General Electric Co.'s total employee benefit assets increased 14.6% from a year earlier. Defined benefit assets increased 12.6% during the same period; defined contribution assets increased 24.6%. Contributions and benefit payments are for 1990.

Equity managers: Domestic — Cursitor Eaton; Goldman Sachs; Montgomery; Morgan Guaranty; T. Rowe Price; Progress Trusts; Sarofim; and Wells Fargo Nikko.

International — Boston Overseas; Capital Guardian; Emerging Markets Investors; and Rowe Price-Fleming.

Fixed-income managers: Domestic — Blackstone Group; Commonwealth; Goldman Sachs; J.P. Morgan; NISA; and Ryan Labs.

Real estate managers: Equitable; J.P. Morgan; and Hancock.

Other managers: Butler; Electra; Forstmann-Little; and Warburg Pincus.

The master trustee and global custodian is State Street Bank; the investment consultants are SEI; Callan; Rogers, Casey; Hewitt; Mercer; Becker, Burke; and Russell.

Key personnel overseeing the investment management of the fund are Dale Frey, chairman and president of GE Investments, and Gene Bolton and John Myers, executive vice presidents of GE Investments.

General Motors Corp.

	($ millions)
Total assets	40,800
Defined benefit	34,200
Total defined contribution	6,600

NEW YORK — As of Sept. 30, General Motors Corp.'s total employee benefit assets increased 12.4% from a year earlier. Defined benefit assets increased 11.4% during the same period; defined contribution assets increased 17.9%.

Managers: Domestic — Aetna; AEW; American National, Chicago; Ameritrust; Associated Capital; Bankers Trust; Baring America; Baring International; Barrow, Hanley, Mewhinney & Strauss; Batterymarch; BEA; Beal; Beekman; Sanford Bernstein; Boston Co. Real Estate; Brinson; Canada Life; Capital Guardian; Chancellor; Chase Manhattan; Citibank; County NatWest; Cypress; Delaware Investment; Dewey Square; DFA; Duncan-Hurst; Fidelity Management; FNB Boston; Franklin Portfolio; Frontier; G.T. Capital; Genesis; Harris Trust; Hill Samuel; WR Huff; INVESCO; Jennison; Kleinwort Benson; Lazard Freres; Lehman Ark; Lincoln Capital; MacKay-Shields; Magten; Marathon; Matrix; Massachusetts Mutual; Mellon Bank; Merrill Lynch Asset; Metropolitan Life; Morgan Grenfell; J.P. Morgan; Morgan Stanley; National Bank of Detroit; Nomura Capital; Oechsle; Pictet International; Provident Investment; Prudential; RPI; Rosenberg Institutional; Rowe Price-Fleming; N.M. Rothschild; Schroder Capital; Sit; TAL Investment; TCW Asset; Union Bank of Switzerland; United Capital; Value Line; Warburg Investment; Wells Fargo; WorldInvest; and Wall Street Associates.

The master trustees are Bankers Trust, Mellon Bank and Chase Man-

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Key personnel overseeing the investment management of the fund are W. Gordon Binns, vice president and chief investment funds officer, and R. Charles Tschampion, vice president-portfolio strategy and manager relations group.

Employees' Retirement System of Georgia

	($ millions)
Total assets	4,150
Defined benefit	4,150

ATLANTA — As of September 30, Employees' Retirement System of Georgia total employee benefit assets increased 10.7% from a year earlier. All assets are defined benefit.

Key personnel overseeing the investment management of the fund are Rudolph Johnson, director, and James Larche, deputy director.

Georgia-Pacific Corp.

	($ millions)
Total assets	1,856
Defined benefit	1,249
Total defined contribution	607
Profit-sharing	4
401(k)	546
Money purchase	57
Internally managed assets:	
Total DB	16
Total DC	350
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	64.6%
Fixed income	29.8%
Cash equivalents	2.3%
Real estate equity	3.3%
Defined contribution asset mix:	
Company stock	14.1%
Other stock	10.8%
GICs/BICs	67.3%
Cash equivalents	7.8%

ATLANTA — As of Sept. 30, Georgia-Pacific Corp.'s total employee benefit assets increased 15.9% from a year earlier. Defined benefit assets increased 16.5% during the same period; defined contribution assets increased 14.5%.

Equity managers: Domestic — Chancellor; Cramer Rosenthal McGlynn; Husic; PIMCO; Suffolk Capital; SunBank Capital; State Street Research; Tweedy, Browne; UBS Asset; and Wells Fargo Nikko.

International — Bankers Trust; Mercator; UBS Asset; and WorldInvest.

Fixed-income managers: Domestic — Bradford & Marzec; Loomis, Sayles; PIMCO; UBS Asset; and Wells Fargo Nikko.

Real estate managers: Aetna; Copley; Equitable; JMB; RREEF; and TCW.

Limited partnerships: Citicorp; Clayton & Dubilier; Equitable Capital; Green Capital; HLM Management; KKR; Morgan Stanley; TCW; and Wasserstein, Perella.

The master trustee is Bankers Trust; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are John E. Stettler, director-benefit investments/risk management, and Anthony R. Abbott, assistant director-benefit investments management.

Teachers Retirement System of Georgia

	($ millions)
Total assets	12,354
Defined benefit	12,354
Employer DB contributions	481
Benefit payments	384
Internally managed assets	7,866
Defined benefit asset mix:	
Stocks	40.7%
Fixed income	54.5%
Cash equivalents	4.7%
Mortgages	0.1%

ATLANTA — As of Sept. 30, the Teachers Retirement System of Georgia's total employee benefit assets increased 25.2% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atlanta Capital; C&S/Sovran; INVESCO; and Wellington.

The master trustee is C&S/Sovran.

Key personnel overseeing the investment management of the fund are Charles W. Cary Jr., director-investment services division, and Nancie H. Boedy, assistant director-investment services division.

Grumman Corp.

	($ millions)
Total assets*	3,650
Defined benefit	2,462
Defined contribution	1,188
Employer DB contributions	52
Benefit payments	100
Employer DC contributions	17
*P&I estimate	
Internally managed assets:	
Total DB	2,314
Total DC	1,188
Defined benefit asset mix:	
Stocks	35%
Fixed income	41%
Cash equivalents	18%
Real estate equity	5%
Other	1%
Defined contribution asset mix:	
Company stock	25%
Other stock	7%
Fixed income	7%
GICs/BICs	51%
Cash equivalents	10%

BETHPAGE, N.Y. — As of Sept. 30, Grumman Corp.'s total employee benefit assets increased an estimated 17.7% from a year earlier. Defined benefit assets increased 15.6% during the same period; defined contribution assets increased an estimated 22%. The estimate for total and defined contribution assets was made because defined contribution assets were as of Dec. 31, 1990, and were estimated to reflect a Sept. 30, 1991, amount.

Real estate managers: CIGNA, Equitable, Prudential, Sentinel.

The master trustee is Bank of New York.

The key person overseeing the investment management of the fund is W. R. Parmentier, assistant treasurer/investment manager.

GTE Corp.

	($ millions)
Total assets	14,976
Defined benefit	12,434
Total defined contribution	2,542
Employer DB contributions	0
Benefit payments	288
Employer DC contributions	61
Internally managed assets:	
Total DB	2,822
Defined benefit asset mix:	
Stocks	63%
Fixed income	23%
Cash equivalents	7%
Real estate equity	1%
Alternatives	6%
Defined contribution asset mix:	
Company stock	49%
Other stock	12%
Fixed income	1%
GICs/BICs	38%

STAMFORD, Conn. — As of Sept. 30, GTE Corp.'s total employee benefit assets increased 26.6% from a year earlier. Defined benefit assets increased 27.9% during the same period; defined contribution assets increased 20.9%.

Equity managers: Domestic — Baker, Nye; Bankers Trust; Sanford C. Bernstein; BMI; Cashman, Farrell; Concord; Eagle; First Manhattan; First Pacific; Franklin Portfolio; Frontier; GeoCapital; Hotchkis and Wiley; Oppenheimer; Provident Investment Counsel; RCB; Richter; Rosenberg Institutional; Donald Smith; Weiss, Peck and Greer.

International — Bankers Trust; Baring; Grantham, Mayo; J.P. Morgan; Mercator; Nikko; Philippe; Rowe Price-Fleming; TCW/Cursitor-Eaton; Yamaichi.

Fixed-income managers: Domestic — Baring; Darien; PIMCO; Rampart.

International — J.P. Morgan; Rogge; Security Capital; TCW/Cursitor-Eaton; and WorldInvest.

Real estate managers: Citibank; Manufacturers National; State Street Bank; TCW.

Non-traditional managers: — Chancellor; Consolidated Oil & Gas; Energy Investors; Forest Investment; John Hancock; TCW; and UBS.

The master trustee is and global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are John B. Carroll, president of GTE In-

Top 200 funds with defined contribution assets in international investments

($ millions)

Fund	Total	Equities	Bonds	Other
TIAA-CREF	5,648	5,470	170	8
Bechtel Power	521	376	145	0
American Stores	281	182	99	0
Halliburton	174	131	43	0
Trans World Airlines	148	148	0	0
Evangelical Lutheran Church	140	77	63	0
Hewlett-Packard	87	87	0	0
University of California	76	60	16	0
Motorola	74	74	0	0
Southern Baptist Convention	46	31	15	0
Citibank	45	45	0	0
Sears, Roebuck	42	42	0	0
Xerox	33	32	0	1
United Methodists	25	25	0	0
Owens-Illinois	18	18	0	0
Atlantic Richfield	15	0	0	15
Eli Lilly	5	5	0	0
Procter & Gamble	5	5	0	0
Chrysler	1	1	0	0
Total	**7,384**	**6,809**	**551**	**24**

Top 200 funds with defined benefit assets in international investments

($ millions)

Fund	Total	Equities	Bonds	Other
California Employees	9,453	6,371	3,082	0
United Nations	5,520	2,485	2,473	562
AT&T	2,544	2,544	0	0
GTE	2,416	1,715	701	0
New York City	2,257	1,827	430	0
Pacific Telesis	2,092	2,092	0	0
Connecticut Trust	1,763	1,229	534	0
NYNEX	1,754	1,368	386	0
World Bank	1,745	1,278	467	0
General Electric	1,623	1,597	26	0
Bell Atlantic	1,611	1,518	93	0
Wisconsin State	1,611	934	677	0
Illinois Teachers	1,441	838	603	0
Oregon Employes	1,399	1,209	190	0
Colorado Employees	1,348	1,299	49	0
Du Pont	1,285	862	423	0
U S WEST	1,174	1,174	0	0
United Technologies	1,126	1,002	124	0
Pennsylvania Public Schools	1,100	328	772	0
Los Angeles County	924	892	32	0
Illinois Municipal	905	764	140	1
Hawaii State	847	675	172	0
Prudential Insurance	842	480	333	29
New Jersey	750	0	750	0
Philip Morris	724	724	0	0
San Francisco City & County	699	312	387	0
Atlantic Richfield	694	628	66	0
Pennsylvania State	692	356	336	0
New York State & Local	683	683	0	0
Texas Teachers	650	650	0	0
Tennessee Consolidated	632	344	288	0
Virginia	595	595	0	0
Arizona State	567	567	0	0
Exxon	480	480	0	0
Owens-Illinois	463	361	102	0
Pacific Gas & Electric	462	462	0	0
Caterpillar	439	439	0	0
Kansas Employees	429	312	117	0
Nevada Employees	424	318	106	0
USX	400	240	160	0
Southwestern Bell	398	398	0	0
Delta Air Lines	387	387	0	0
TRW	368	236	132	0
Travelers	352	323	29	0
Presbyterian Church	327	227	100	0
Chevron	323	203	59	61
Illinois Universities	312	312	0	0
New York State Teachers	311	311	0	0
Mobil Oil	300	220	80	0
Xerox	292	276	2	14
Alaska State	287	287	0	0
Southern Co.	280	140	140	0
Monsanto	270	270	0	0
University of California	267	49	218	0
GenCorp	263	132	131	0
S. California Edison	253	238	15	0
Utah State	250	250	0	0
FPL Group	249	249	0	0
Los Angeles Fire & Police	242	242	0	0
Iowa Employees	239	239	0	0
Aluminum Co. of America	234	106	123	5
S. New England Telephone	233	233	0	0
Unisys	227	227	0	0
Amoco	220	220	0	0
Honeywell	216	131	85	0
North Carolina	211	211	0	0
ITT	206	206	0	0
Westinghouse Electric	201	201	0	0
Illinois State	198	173	25	0
Minnesota Mining & Mfg.	180	155	25	0
Maryland State	180	180	0	0
Inland Steel	163	163	0	0
Washington State Board	159	159	0	0
Alabama Retirement	152	152	0	0
CIGNA	147	147	0	0
Mississippi Employees	137	137	0	0
Idaho Employees	135	135	0	0
American Airlines	130	130	0	0
Maine State	130	130	0	0
J.C. Penney	129	129	0	0
Nat'l Rural Electric Co-op	128	128	0	0
Episcopal Church	120	40	80	0
Sears, Roebuck	118	118	0	0
Georgia-Pacific	117	117	0	0
International Paper	114	114	0	0
Louisiana Teachers	110	100	10	0
BankAmerica	106	83	23	0
New York Life	105	80	0	25
Chrysler	100	100	0	0
United Airlines	100	100	0	0
Deere	97	97	0	0
Aetna Life	89	89	0	0
Chicago Municipal	84	84	0	0
Tenneco	82	67	15	0
Eli Lilly	79	79	0	0
PPG Industries	66	66	0	0
Johnson & Johnson	65	65	0	0
Florida State Board	58	58	0	0
Rhode Island Employees	51	51	0	0
Boeing	50	30	0	20
Los Angeles City	45	45	0	0
Motorola	38	38	0	0
Southern Baptist Convention	37	37	0	0
Bethlehem Steel	30	30	0	0
Hewlett-Packard	28	28	0	0
New Mexico Educational	27	27	0	0
United Methodists	20	20	0	0
General Dynamics	16	16	0	0
Citibank	4	0	4	0
American Stores	3	3	0	0
Bakery & Confectionery	3	0	3	0
Total	**68,211**	**52,176**	**15,318***	**717**

vestment Management Corp.; T. Britton Harris IV, vice president-pension fund management; and Stephen V. Weidemann, vice president-fixed-income management.

H

Halliburton Co.

	($ millions)
Total assets	2,667
Total defined contribution	2,667
Employer DB contributions	0
Benefit payments	0
Employer DC contributions	66
Internally managed assets	774
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined contribution asset mix	
Company stock	4%
Other stock	28%
Fixed income	24%
GICs/BICs	29%
Cash equivalents	7%
Mortgage-backed securities	8%

DALLAS — As of Sept. 30, Halliburton Co.'s total employee benefit assets increased 18% from a year earlier. All the assets are defined contribution.

Equity managers: Domestic — Eagle; GAMCO; Husic; Lehman Ark; Phoenix Investment; and Sarofim.

International — Boston Overseas; SBC; and Schroder Capital.

Fixed-income managers: Domestic — BEA; Lehman Ark; Neuberger & Berman; PIMCO; Putnam; Sovran; and TCW.

International — Putnam.

Other manager: Loomis Sayles.

The master trustee and global custodian is State Street Bank; the investment consultant is SEI.

The key person overseeing the investment management of the fund is Nathaniel H. Duffield, director-trust investments.

Employees' Retirement System of the State of Hawaii

	($ millions)
Total assets	4,520
Defined benefit	4,520
Employer DB contributions	59
Benefit payments	225
Internally managed assets	899
Hedging devices used	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	46%
Fixed income	31.5%
Cash equivalents	4.7%
Real estate equity	8.3%
GICs/BICs	0.4%
Mortgages	9.1%

HONOLULU — As of Sept 30, the Employees' Retirement System of the State of Hawaii's total employee benefit assets increased 9.7% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Barrow, Hanley, Mewhinney & Strauss; C.M. Bidwell; Cadinha; Delaware; Hanson; J.B. Harve; Independent; McCowan; and Denis Wong.

International — Daiwa; Nikko; Nomura; and Schroder.

Fixed-income managers: Domestic — Bradford & Marzec; Brinson; Lowe, Brockenbrough, Tierney & Tattersall; Mellon Capital; PIMCO; Scudder, Stevens, & Clark; and Security Pacific.

International — Deutsche Asset; Oechsle; PCM International; and Putnam International.

Real estate managers: Aetna; Beta West; Trammell Crow; Devon Institutional; Hancock; Metropolitan Life; PSI; and TCW Realty.

The master custodian and global custodian is Bank of New York; the investment consultants are Callan and Wyatt Asset Services.

Key personnel overseeing the investment management of the fund are Stanley Siu, administrator; David Shimabukuro, assistant administrator; and Wesley Machida, chief accountant.

Hewlett-Packard Co.

	($ millions)
Total assets	1,925
Defined benefit	470
Profit-sharing	1,455
Internally managed assets:	
Total DB	116
Defined benefit asset mix:	
Stocks	49%
Fixed income	35%
Cash equivalents	5%
Real estate equity	1%
International stock	6%
Venture capital	3%
LBOs	1%
Defined contribution asset mix:	
Other stock	45%
Fixed income	39%
Cash equivalents	6%
Real estate equity	1%
International stock	6%
Venture capital	2%
LBOs	1%

PALO ALTO, Calif. — As of Sept. 30, Hewlett-Packard Co.'s total employee benefit assets increased 37.3% from a year earlier. Defined benefit assets increased 106% during the same period; defined contribution assets increased 24%.

The key person overseeing the investment management of the fund is Elizabeth Obershaw, manager, benefit fund investments.

Honeywell Inc.

	($ millions)
Total assets	2,855
Defined benefit	2,080
401(k)	775
Employer DB contributions	88
Benefit payments	158
Defined benefit asset mix:	
Stocks	54.1%
Fixed income	28.6%
Cash equivalents	2.5%
Real estate equity	8%
Other	6.8%
Defined contribution asset mix:	
Company stock	2.5%
Other stock	25.3%
GICs/BICs	38.5%

*+ 67.1% in Dollar/Mark. **

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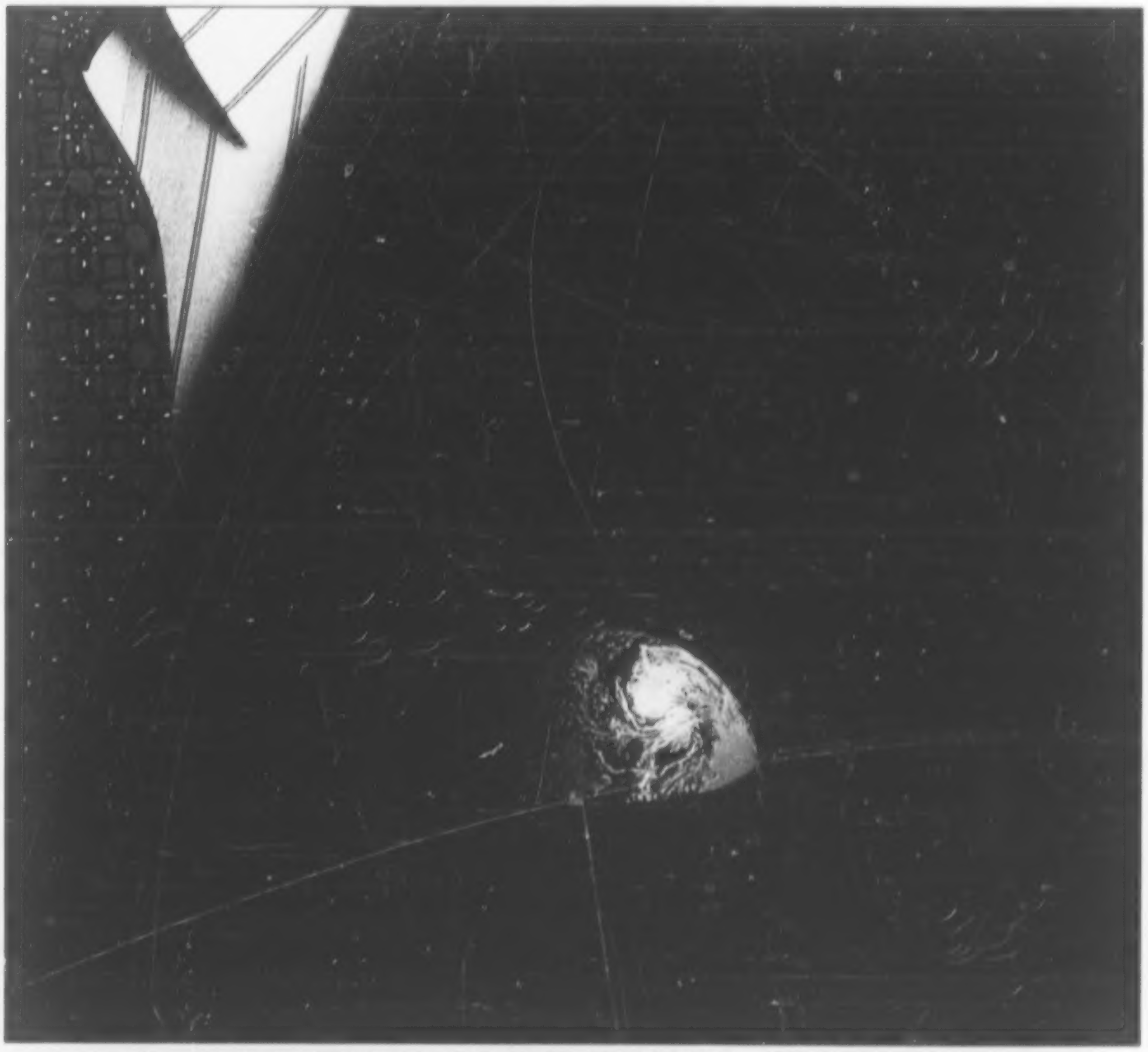
Currencies				Stock Indices			
£	+31.7%	SF	+47.9%	FT30	+49.6%	Hang Seng	+40.4%
¥	+22.9%	£/¥	+17.5%	Topix	+39.1%	S&P500	+51.1%
C$	+11.3%	A$	+11.9%	Nikkei	+38.4%	Nasdaq	+56.3%



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Cash equivalents	9.8%
Other	23.9%

MINNEAPOLIS — As of Sept. 30, Honeywell Inc.'s total employee benefit assets increased 0.6% from a year earlier. Defined benefit assets increased 6.6% during the same period; defined contribution assets decreased 12.6%.

Equity managers: Domestic — Alliance; Brinson; Forstmann-Leff; GAMCO; Husic; Jundt; and Mellon Capital.

International — Baring and IDS.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts.

International — Brinson.

Real estate managers: Aetna; AMB; Baring; Coldwell Banker; State Street Bank; and TCW.

Other managers: Advent International; Associated Venture; Bridge Capital; Centennial Fund; Cherokee Resources; Concord Partners; DLJ Growth Associates; Dougery, Jones & Wilder; First Reserve; Forstmann Little; John Hancock; Investech; Medical Innovations; Morgan, Holland; Narragansett First Fund; New Court Partners; Norton Associates; Olympus Private Placement Fund; Recovery Management Investors; Robertson Coleman, Stephens & Woodman; TA Associates; TCW; T. Rowe Associates; Travelers; UBS Asset; and Welsh Carson Anderson & Stowe.

The master trustee is Boston Safe; the global custodian is Chase; the investment consultant is Rogers, Casey.

Key personnel overseeing the investment management of the fund are D.W. Veverka, director-pension investments, and D.J. Gorence, manager-pension investments.

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National Benefit Fund for Hospital & Health Care Employees

	($ millions)
Total assets	2,249
Defined benefit	2,249
Employer DB contributions	11
Benefit payments	58
Defined benefit asset mix:	
Stocks	36.3%
Fixed income	43%
Real estate equity	7.7%
GICs/BICs	13%

NEW YORK — As of Sept. 30, the National Benefit Fund for Hospital & Health Care Employees' total employee benefit assets increased 16.4% from a year earlier. All assets are defined benefit.

Equity managers: Lazard Freres; Lehman Ark; Loomis, Sayles;

Fixed-income managers: Criterion; PIMCO; State Street.

Real estate managers: Equitable and Prudential.

The master trustee is Northern Trust; the investment consultant is Marco.

Roland Grant, chief financial officer, oversees investment management of the fund.

Hughes Aircraft Co.

	($ millions)
Total assets*	7,900
Defined benefit	5,400
Total defined contribution	2,500

*P&I estimate

LOS ANGELES — As of Sept. 30, *Pensions & Investments* estimates Hughes Aircraft Co.'s total employee benefit assets increased 25.4% from the $6.3 billion reported in the Money Market Directory as of June 30, 1990. Defined benefit assets increased an estimated 28.6% during the same period; defined contribution assets increased 19%.

Board of Trustees of the I.A.M. National Pension Fund

	($ millions)
Total assets	1,005
Defined benefit	1,000
Money purchase	5
Employer DB contributions	67
Benefit payments	87
Employer DC contributions	2
Defined benefit asset mix:	
Stocks	57%
Fixed income	38%
Cash equivalents	5%
Defined contribution asset mix:	
Cash equivalents	100%

WASHINGTON — As of Sept. 30, the Board of Trustees of the I.A.M. National Pension Fund's total employee benefit assets increased 15.7% from a year earlier. Defined benefit assets increased 15.7% during the same period; defined contribution assets increased 25%.

Equity managers: Domestic — Dodge & Cox; Lazard Freres; State Street Bank; and Stein Roe & Farnham.

Fixed-income managers: Domestic — Dodge & Cox; Lazard Freres; State Street Bank; and Stein Roe & Farnham.

Cash manager: Payden & Rygel.

The master trustee is State Street.

The board of trustees oversees the investment management of the fund.

IBM Corp.

	($ millions)
Total assets	29,000
Defined benefit	24,200
401(k)	4,800
Employer DB contributions	0

Hedging devices used:
Stock options
Bond options
Stock index futures
Fixed-income futures

STAMFORD, Conn. — As of Sept. 30, IBM Corp.'s total employee benefit assets increased 16% from a year earlier. Defined benefit assets increased 14.2% during the same period; defined

Top 200 defined benefit average asset mix

	1991	1990
Corporate		
Stocks	54.4%	48.7%
Fixed income*	32.5	34.2
Cash	5.8	7.5
Real estate equity	4.1	5.3
Mortgages	0.3	0.3
GICs/BICs	0.9	1.1
Annuities	0.1	0.6
Other	1.9	2.3
Public		
Stocks	40.9%	36.7%
Fixed income*	46.5	46.8
Cash	5.0	7.0
Real estate equity	3.9	4.6
Mortgages	2.0	2.8
GICs/BICs	0.2	0.2
Annuities	0.0	0.0
Other	1.5	1.9
Union		
Stocks	41.3%	37.3%
Fixed income*	41.8	40.0
Cash	5.4	8.9
Real estate equity	5.1	3.8
Mortgages	2.6	3.0
GICs/BICs	1.7	4.5
Annuities	1.2	1.5
Other	0.9	1.0

*Includes mortgage-backed securities

Top 200 defined contribution average asset mix

	1991	1990
Corporate		
Company stock	30.6%	27.1%
Other stock	15.2	14.8
Fixed income*	13.9	9.5
Cash	6.4	7.2
GICs/BICs	30.7	39.6
Annuities	0.0	0.0
Other	3.2	1.8
Public		
Stocks	22.9%	15.6%
Fixed income*	38.8	73.1
Cash	13.9	9.3
GICs/BICs	23.4	2.0
Annuities	0.0	0.0
Other	0.0	0.0
Union		
Stocks	21.0%	14.7%
Fixed income*	14.3	15.3
Cash	48.7	48.6
GICs/BICs	11.7	11.7
Annuities	0.0	0.0
Other	4.3	9.7

*Includes mortgage-backed securities

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contribution assets increased 26.3%.

Equity managers: Domestic — Alliance; Butler; Chancellor; Columbus Circle; Delaware; Dillon Read; DFA; DSI; Fidelity Investment; Forstmann Little; F.S. Equity; Independence; Hancock; Lincoln Capital; NCM; Resource Investors; State Street Bank; Warburg Pincus; and Wellington.

International — Acadian; BEA; Capital Guardian; DFA; DSI; HD International; Matuschka Moser; J.P. Morgan; Nomura; Oechsle; Rowe Price-Fleming; and State Street Bank.

Fixed-income managers: Domestic — BEA; Fischer, Francis, Trees & Watts; Hoisington; Lincoln Capital; Miller, Anderson & Sherrerd; and PIMCO.

International — Morgan Grenfell and WorldInvest.

Real estate managers: AEW; Cabot; Dreyfus; Equitable; Grubb & Ellis; Wells Fargo; and Yarmouth.

The master trustee and global custodian is Chase; the investment consultant is Russell.

ICMA Retirement Corp.

	($ millions)
Total assets	2,160
Total defined contribution	2,160
457	1,940
Money purchase	220
Employer DC contributions	25
Internally managed assets	1,421
Hedging devices used	
Stock index futures	
Fixed-income futures	
Defined contribution asset mix	
Other stock	27%
Fixed income	5%
GICs/BICs	65%
Cash equivalents	3%

WASHINGTON — As of Sept. 30, ICMA Retirement Corp.'s total employee benefit assets increased 31.7% from a year earlier. All assets are defined contribution.

Equity managers: Domestic — Avatar; Fidelity Management; Hutson; Janus; Lehman Ark; Mellon Capital; and Wilshire.

Fixed-income managers: Domestic — Lowe, Brockenbrough, Tierney & Tattersall; Mellon Capital; and Payden & Rygel.

The master trustee is State Street; the investment consultant is Whitehead/Sterling.

Key personnel overseeing the investment management of the fund are Cynthia A. Hargadon, senior vice president and chief investment officer; Agnes E. Wasowski, manager-total return funds and P. Stanley Shavers, director-investment contract management.

Public Employee Retirement System of Idaho

	($ millions)
Total assets*	1,916
Defined benefit	1,916
Employer DB contributions	104
Benefit payments	111
as of June 30, 1991	
Hedging devices used	
Stock options	
Defined benefit asset mix	
Stocks	47%
Fixed income	36%
Cash equivalents	2%
Real estate equity	9%
Mortgages	6%

BOISE, Idaho — As of June 30, the Public Employee Retirement System of Idaho's total employee benefit assets increased 17% from nine months earlier. All assets are defined benefit.

Equity managers: Domestic — Columbus Circle; Eaton Vance; Husic; Mellon Capital; Mountain Pacific; Newell; and Wellington.

International — BEA; Clay Finlay; Dillon Read; Rowe Price-Fleming; Prudential Asia; and Schroder.

Fixed-income managers: Domestic — BEA; Sanford Bernstein; D.B. Fitzpatrick; and State Street Bank.

Real estate managers: Cabot, Cabot & Forbes; Equitable; LaSalle; Metropolitan; O'Connor; Prentiss; Prudential; and Sentinel.

The master custodian and global custodian is Mellon Bank; the investment consultant is Dorn & Helliesen.

Key personnel overseeing the investment management of the fund are Paula Treneer, chief investment officer; Isabelle Fowler, assistant investment officer; and Alan Winkle, executive director.

Illinois Municipal Retirement Fund

	($ millions)
Total assets*	5,318
Defined benefit	5,318
Employer DB contributions	255
Benefit payments	223
as of Aug. 31, 1991	
Internally managed assets	132
Hedging devices used	
Bond options	
Fixed-income futures	
Defined benefit asset mix	
Domestic stocks	39.7%
Domestic bonds	29.4%
Cash equivalents	2.5%
Real estate equity	7.9%
Mortgages	1.8%

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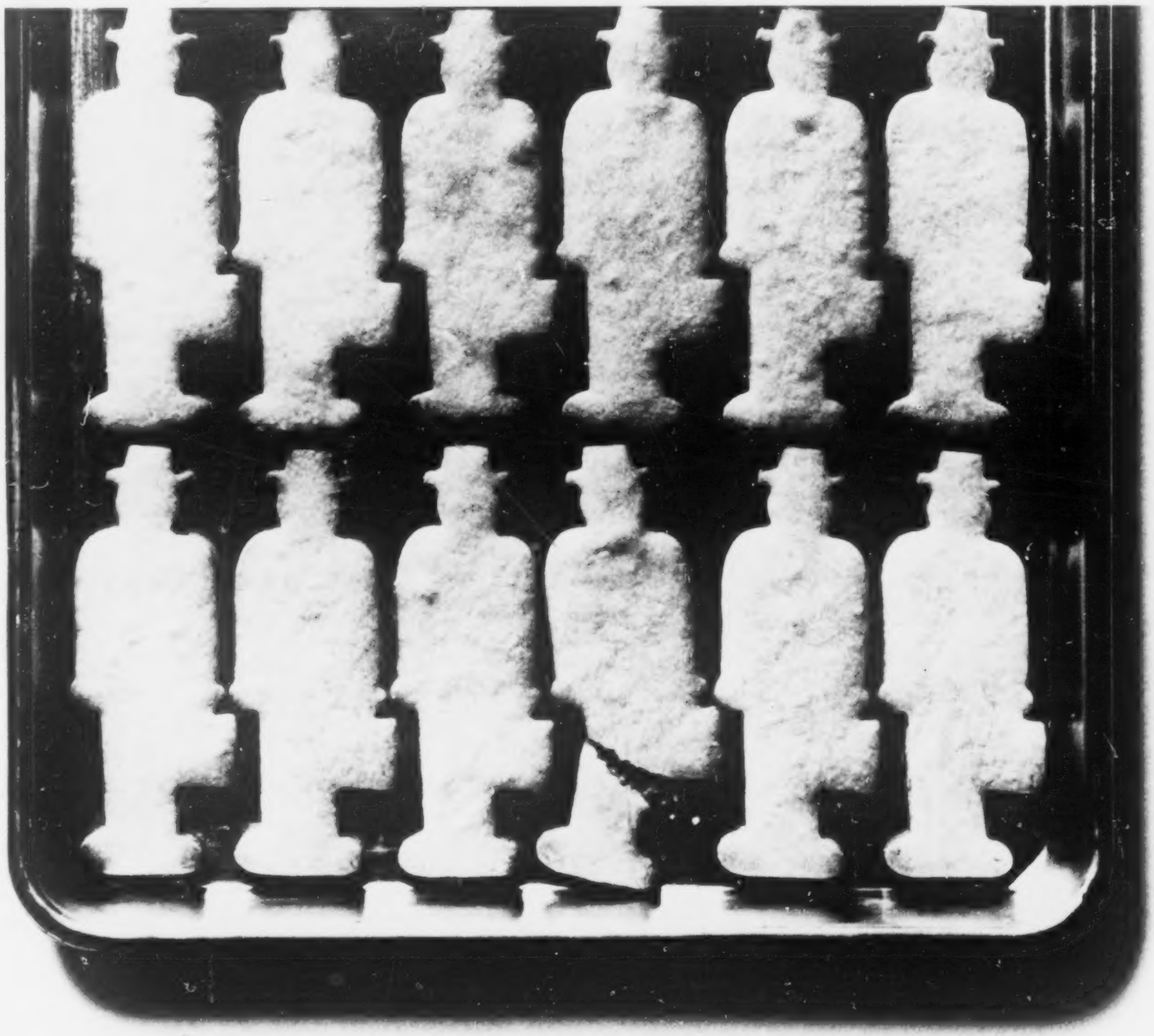

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CHICAGO — As of Aug. 31, Illinois Municipal Retirement Fund's total employee benefit assets increased 25.5% from Sept. 30, 1990. All assets are defined benefit.

Equity managers: Domestic — ANB; Campbell, Cowperthwait; Dalton, Greiner; DFA; Duff & Phelps; Eagle Asset; Fidelity Management; Frontier; Lincoln Capital; Provident Investment; Wall Street Associates.

International — ANB; Baring; J.P. Morgan; Nomura; Schroder; TIMCO.

Fixed-income managers: Domestic — ANB; Criterion; Fidelity Management; Payden & Rygel.

International — Julius Baer.

Real estate managers: Equitable; JMB; LaSalle; Piedmont Realty; RREEF; Sentinel; TCW Realty.

Venture capital managers: Abbott Capital; Brinson; Larimer; Oxford.

The master trustee and global custodian is Northern Trust; the investment consultants are Mercer and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are Robert L. Cusma, executive director; Walter J. Koziol, director-investments; and Edward N. Sambol, investment manager.

Illinois State Board of Investment

	($ millions)
Total assets*	3,503
Defined benefit	3,503

*as of June 30, 1991

Internally managed assets	
Total DB	1,405
Defined benefit asset mix	
Stocks	41.8%
Fixed income	39.3%
Cash equivalents	4%
Real estate equity	9.7%
Non-marketable securities	5.2%

CHICAGO — As of Sept. 30, the Illinois State Board of Investment's total employee benefit assets increased 15% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Ariel; Cooke & Bieler; Disciplined; Fidelity Management; Lazard Freres; Lincoln Capital; Loomis, Sayles; Marshall Plan; Newbold's; Southeastern; T-K Capital; TCW.

International — Acadian; Brinson; Clay Finlay; Delaware International; Templeton; TCW.

Fixed-income managers: Calamos; Delaware Investment; Fidelity Management; J.P. Morgan.

Real estate managers: Aetna; AMLI; Brinson; Cozad/Westchester; Heitman; JMB; PSI; TCW; VMS; ZML.

Non-marketable securities managers: Candover Partners; Corporate Advisors; Frontenac; Golder, Thoma & Cressey; Hancock Venture; KKR; Menlo Ventures; Prudential Venture.

The master and global custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Jane R. Patterson, executive director, and Larry Darlington, investment officer-fixed income.

State Universities Retirement System of Illinois

	($ millions)
Total assets*	4,210
Defined benefit	4,210
Employer DB contributions	100
Benefit payments	220

*as of June 30, 1991

Internally managed assets	20
Defined benefit asset mix	
Stocks	57%
Fixed income	31%
Cash equivalents	2%
Real estate equity	10%

CHAMPAIGN, Ill. — As of June 30, the State Universities Retirement System of Illinois' total employee benefit assets increased 6.3% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Ariel; Amerindo; Brinson; Fisher Investments; PIMCO; Rosenberg Institutional; Sarofim; Smith Barney; Wells Fargo Nikko; and Zevenbergen.

International — Wells Fargo Nikko.

Fixed-income managers: Domestic — PIMCO and Wells Fargo Nikko.

Real estate managers: Aetna; Equitable; JMB; and RREEF.

Other managers: Brinson.

The master custodian is Northern Trust; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Kenneth Codlin, chief investment officer, and Jeanne Valcik, associate investment officer.

Teachers' Retirement System of the State of Illinois

	($ millions)
Total assets	9,888
Defined benefit	9,888
Employer DB contributions	294
Benefit payments	573

Hedging devices used

Top 200 funds with assets in mortgages*

Fund	($ millions)
TIAA-CREF	20,880
California Employees	3,215
New York State & Local	2,617
Alabama Retirement	2,115
New York State Teachers	1,916
Texas Teachers	1,800
Ohio Teachers	1,324
State of Michigan	1,006
Pennsylvania State	762
California State Teachers	672
Oregon Employes	640
U S WEST	531
Nat'l Electrical Contractors	456
Hawaii State	408
General Electric	400
Colorado Employees	399
Connecticut Trust	267
Kentucky Retirement	266
Pennsylvania Public Schools	251
Arizona State	250
New York City	250
Alaska State	174
Western Teamsters	174
Bakery & Confectionery	159
Wisconsin State	151
Westinghouse Electric	150
Operating Engineers	141
Montana Board	119
Idaho Employees	113
Kentucky Teachers	105
Illinois Municipal	97
Arkansas Teachers	88
Los Angeles County	85
Owens-Illinois	72
Nevada Employees	71
Los Angeles Fire & Police	61
Tenneco	40
USX	30
Ohio School Employees	28
Missouri State	23
Aetna Life	21
GenCorp	21
Southern Baptist Convention	16
Delta Air Lines	15
Utah State	15
Ohio Police & Fire	13
Louisiana Employees	11
Georgia Teachers	10
Halliburton	10
Atlantic Richfield	9
Citibank	5
New Mexico Emloyees	3
Minnesota Mining & Mfg.	2
S. California UFCW	2
United Methodists	2
Tennessee Consolidated	1
Trans World Airlines	1
Total	**42,463**

*All assets are defined benefit except for those of TIAA-CREF and Halliburton, which are all defined contribution assets, and the assets of the United Methodists, which include $1 million in defined contribution assets.

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Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix	
Stocks	43.6%
Fixed income	26.9%
Cash equivalents	0.4%
Real estate equity	13.2%
International stock	8.5%
International fixed income	6.1%
Other	1.3%

SPRINGFIELD, Ill. — As of Sept. 30, the Teachers' Retirement System of the State of Illinois' total employee benefit assets increased 21% from a year earlier. All assets are defined benefit.

Equity managers: International — ANB; Bankers Trust; Brinson; Burgess; Clay Finlay; Daiwa; HD International; Murray Johnstone; PCM; Scudder.

Fixed-income managers: Domestic — ANB; Bear Stearns; PIMCO.

International — Brinson Partners; J.P. Morgan; Putnam.

Real estate managers: Bear Stearns; Brinson; Alex Brown; Commonwealth; Cozad; JLW; JMB; Kensington; MacFarlane; TCW.

Other managers: Frontenac; Weiss, Peck & Greer.

The master trustee is Harris Trust & Savings Bank; the investment consultant is Callan Associates.

Key personnel overseeing the investment management of the fund are Fred Husmann, executive director; and Thomas E. Zimmerman, chief investment officer.

Public Employees' Retirement Fund of Indiana

	($ millions)
Total assets	3,802
Defined benefit	3,802
Employer DB contributions	190
Benefit payments	86
Defined benefit asset mix	
Fixed income	99%
Cash equivalents	1%

INDIANAPOLIS — As of Sept. 30, the Public Employees' Retirement Fund of Indiana's total employee benefit assets increased 22.5% from a year earlier. All assets are defined benefit.

Fixed-income managers: Domestic — Bank One Indianapolis; INB National Bank; Lehman Ark; Prime Capital.

The investment consultant is Performance Analytics.

Indiana State Teachers' Retirement Fund

	($ millions)
Total assets	2,275
Defined benefit	40
Total defined contribution	2,235
Other	2,235
Employer DB contributions	40
Benefit payments	239
Employer DC contributions	0
Defined benefit asset mix	
Fixed income	100%
Defined contribution asset mix	
Fixed income	100%

INDIANAPOLIS — As of Sept. 30, the Indiana State Teachers Retirement Fund's total employee benefit assets increased 13.8% from a year earlier. Defined contribution assets increased 11.8%; a comparison for defined benefit assets was not available.

Fixed-income managers: Domestic — Alliance; Bank of New York; Bank One Indianapolis; Baxter; INB National Bank; Merchants Investment; Todd Investment.

The master custodian is INB National Bank.

The key person overseeing the investment management of the fund is Robert D. Newland, investment officer.

Inland Steel Industries Inc.

	($ millions)
Total assets	2,076
Defined benefit	1,658
Total defined contribution	418
ESOP	15
Other	403
Employer DB contributions	0
Benefit payments	120
Employer DC contributions	11
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Domestic stocks	46.6%
Non-U.S. equities	9.9%
Fixed income	31%
Cash equivalents	3.4%
Real estate equity	9.1%
Defined contribution asset mix	
Company stock	5%
Other stock	6%
GICs/BICs	85%
ESOP	4%

CHICAGO — As of Sept. 30, Inland Steel Industries Inc.'s total employee benefit assets increased 12.3% from a year earlier. Defined benefit assets increased 14.1% during the same period; defined contribution assets — which comprise an ESOP and a combined 401(k) and thrift/savings plan — increased 5.8%.

Equity managers: Domestic — Sanford Bernstein; Chancellor; Dalton

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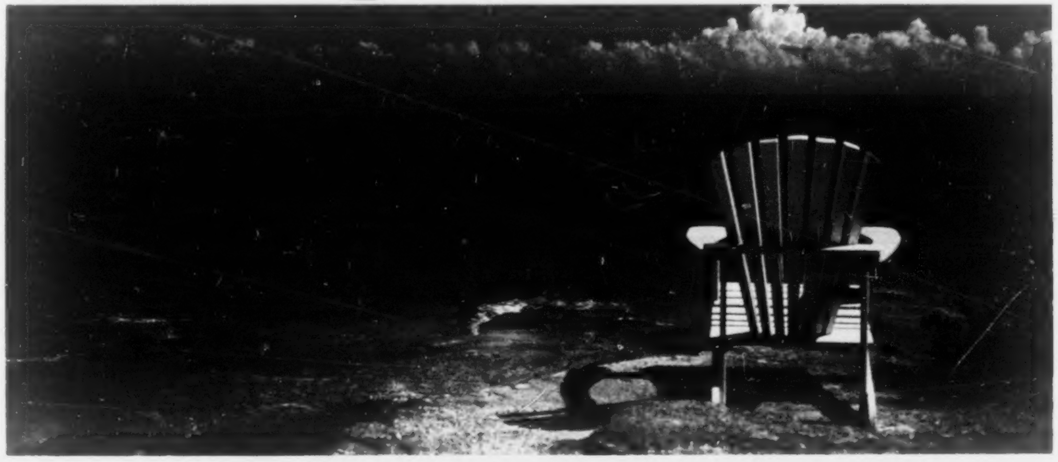

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International — Baring International; Brinson; and Putnam.

Fixed-income managers: Domestic — Lincoln Income.

Real estate managers: Cabot Partners; Equitable; Grubb & Ellis; JMB; MIG; Prudential; Zell/Merrill Lynch.

Other managers: Brinson Partners.

The master trustee is Northern Trust; the investment consultant is DeMarche.

Key personnel overseeing the investment management of the fund are Vicki L. Avril, director-pension investments; Michael G. Rippey, manager-pension investments; and Wale F. Adeosun, analyst-pension investments.

International Paper Co.

	($ millions)
Total assets	3,713
Defined benefit	2,408
Thrift/savings	1,305
Employer DB contributions	0.1
Benefit payments	107
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	68.7%
Fixed income	19.5%
Cash equivalents	3%
Real estate equity	6.4%
GICs/BICs	2.4%
Defined contribution asset mix:	
Company stock	80%
GICs/BICs	16.6%
Loans	3.3%
Balanced	0.1%

PURCHASE, N.Y. — As of Sept. 30, International Paper Co.'s total employee benefit assets increased 38.9% from a year earlier. Defined benefit assets increased 22.4% during the same period; defined contribution assets increased 84.8%.

The trustees are State Street Bank and Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Myra R. Drucker, staff vice president and director-trust investments; and Connie R. Caperella, manager-trust investments.

Iowa Public Employees Retirement System

	($ millions)
Total assets	5,942
Defined benefit	5,942
Employer DB contributions	158
Benefit payments	186
Internally managed assets	57
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	35%
Fixed income	44%
Cash equivalents	1%
Real estate equity	10%
LBOs	9%
Venture capital	1%

DES MOINES, Iowa — As of Sept. 30, the Iowa Public Employees Retirement System's total employee benefit assets increased 20.9% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Capital Guardian; Mellon; RCM.

International — Hill/Samuel; Nomura; Philippe; Schroder.

Fixed-income managers: Domestic — Boston Co.; Loomis, Sayles; Mellon; Miller, Anderson & Sherrerd; J.P. Morgan.

International — Loomis, Sayles; Miller, Anderson & Sherrerd; J.P. Morgan.

Real estate managers: AEW; Copley; Heitman; JMB.

Other managers: Allsop; Cable & Howse; Gibbons, Green; Golda, Thoma; KKR; Interven; Interwest; Invest America; LTOS; Matrix; Menlo; MW; Prime; Steinberg Lyman; Summit; TCW; WCAS.

Boston Safe Deposit & Trust is master custodian and global custodian; Wilshire is investment consultant.

Key personnel overseeing the investment management of the fund are Kathy Comito, acting chief investment officer, and Curtis P. Gerlach, investment officer.

ITT Corp.

	($ millions)
Total assets	2,769
Defined benefit	1,728
Total defined contribution	1,041
Other	1,041
Benefit payments	96
Defined benefit asset mix:	
Stocks	60%
Fixed income	25%
Cash equivalents	7%
Real estate equity	8%
Defined contribution asset mix:	
Company stock	31%
Other stock	12%
GICs/BICs	53%
Cash equivalents	1%
Loan fund	3%

NEW YORK — As of Sept. 30, ITT Corp.'s total employee benefit assets decreased 7.4% from a year earlier. Defined benefit assets increased 19.3% during the same period; defined contribution assets — in a combined 401(k), ESOP and thrift or savings plan — decreased 32.4%.

Equity managers: Domestic — Alliance; American Fund; Barrow Hanley; First Manhattan; GAMCO; Jennison; State Street Research; Verus.

International — Alliance; Capital Guardian; Lazard Freres.

Fixed-income managers: Domestic — Alliance; J.P. Morgan; State Street Research.

International — Morgan International; WorldInvest.

Real estate managers: Coldwell Banker; Corporate Property Investors; Equitable; Metropolitan; RREEF.

Other managers: Alex. Brown; Butler Capital; Blackstone; Corporate Partners; GKH Partners; KKR; Kohlberg & Co.

The master trustee is Northern Trust; the global custodian is Northern Trust-London.

Key personnel overseeing the investment management of the fund are Edwin J. Ehrlich, director-pensions, and Eileen C. Leahy, manager-pensions.

J

Johnson & Johnson

	($ millions)
Total assets	1,962
Defined benefit	1,300
Thrift/savings	662
Employer DB contributions	0.3
Benefit payments	34
Employer DC contributions	0
Defined benefit asset mix:	
Stocks	77.3%
Fixed income	18.8%
Real estate equity	3.9%
Defined contribution asset mix:	
Company stock	18.3%
Other stock	13.7%
GICs/BICs	68%

NEW BRUNSWICK, N.J. — As of Sept. 30, Johnson & Johnson's total employee benefit assets increased 18.9% from a year earlier. Defined benefit assets increased 18.2% during the same period; defined contribution assets increased 20.4%.

Equity managers: Domestic — Alliance Capital; Barrow, Hanley, Mewhinney & Strauss; Capital Guardian; First Manhattan; Nicholas Applegate; Rosenberg.

Fixed-income managers: International — J.P. Morgan; Standish.

Real estate managers: J.P. Morgan: Lehndorff and Babson.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are H. Scott Snead, director-pension investment; and William Rauh, assistant director-pension investment.

K

K mart Corp.

	($ millions)
Total assets	2,109
Defined benefit	1,173
401(k)	936
Internally managed assets:	
Total DB	344
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	59.4%
Fixed income	29%
Cash equivalents	6.7%
Real estate equity	3.2%
Annuities	1.7%
Defined contribution asset mix:	
Company stock	42.3%
Other stock	9.3%
GICs/BICs	48.4%

TROY, Mich. — As of Sept. 30, K mart Corp.'s total employee benefit assets increased 28.4% from a year earlier. Defined benefit assets increased 19.2% during the same period; defined contribution assets increased 42%.

Equity managers: Domestic — Advanced Investment; Alliance; Avatar; BEA; Capital Guardian; Dimensional Fund; Greaves; NCM.

Fixed-income managers: Domestic — BEA Associates.

Real estate managers: Equitec; JMB.

The master trustee is NBD Bank.

Key personnel overseeing the investment management of the fund are Jon Hartman, assistant treasurer; William F. Camp, portfolio manager; and W. Tad Berger, investment analyst.

Kaiser Permanente

	($ millions)
Total assets	2,775
Defined benefit	2,161
Total defined contribution	614
401(k)	139

Bottom 800 defined benefit asset mix

	1991	1990
Aggregate		
Domestic stock	44.9%	40.9%
Domestic fixed income	35.0	34.5
Cash	6.2	9.1
Real estate equity	3.9	4.8
Mortgages	1.0	0.9
GICs/BICs	2.8	3.8
Private placements	0.2	0.3
Annuities	0.4	0.7
International equity	3.3	2.8
International fixed income	0.5	0.4
Venture capital	0.5	0.4
Oil/gas	0.1	0.1
LBOs	0.1	0.1
Other	1.1	1.2
Corporate		
Domestic stock	48.2%	44.3%
Domestic fixed income	31.0	29.8
Cash	6.4	9.4
Real estate equity	3.8	4.6
Mortgages	0.2	0.4
GICs/BICs	3.0	4.4
Private placements	0.2	0.2
Annuities	0.4	0.9
International equity	4.0	3.5
International fixed income	0.5	0.4
Venture capital	0.6	0.6
Oil/gas	0.1	0.1
LBOs	0.1	0.1
Other	1.5	1.3
Public		
Domestic stock	41.0%	35.7%
Domestic fixed income	44.1	44.7
Cash	4.9	8.9
Real estate equity	3.5	5.0
Mortgages	1.8	1.7
GICs/BICs	0.2	0.3
Private placements	0.0	0.1
Annuities	0.5	0.5
International equity	2.3	1.7
International fixed income	0.5	0.2
Venture capital	0.4	0.3
Oil/gas	0.0	0.0
LBOs	0.0	0.0
Other	0.8	0.9
Union		
Domestic stock	31.9%	28.9%
Domestic fixed income	42.9	42.7
Cash	8.1	9.2
Real estate equity	4.5	6.0
Mortgages	4.7	2.9
GICs/BICs	6.7	7.0
Private placements	0.1	0.9
Annuities	0.0	0.6
International equity	0.1	0.2
International fixed income	0.0	0.2
Venture capital	0.1	0.1
Oil/gas	0.0	0.0
LBOs	0.0	0.0
Other	0.9	1.3

Bottom 800 defined contribution asset mix

	1991	1990
Aggregate		
Domestic stock	17.8%	15.4%
Company stock	23.5	24.5
Domestic fixed income	9.7	10.1
Cash	7.3	8.5
Real estate equity	0.7	1.2
Mortgages	0.5	0.2
Annuities	0.7	0.9
GICs/BICs	35.3	32.7
International equity	0.5	0.3
International fixed income	0.1	0.1
Alternative investments*	0.2	0.0
Other	3.7	6.1
Corporate		
Domestic stock	17.6%	15.2%
Company stock	26.9	27.1
Domestic fixed income	6.4	8.1
Cash	6.7	7.1
Real estate equity	0.6	1.0
Mortgages	0.3	0.0
Annuities	0.3	0.7
GICs/BICs	36.9	34.2
International equity	0.4	0.3
International fixed income	0.0	0.1
Alternative investments*	0.1	0.0
Other	3.8	6.2
Public		
Domestic stock	26.4%	26.7%
Domestic fixed income	29.7	23.1
Cash	6.0	11.7
Real estate equity	1.3	0.9
Mortgages	0.2	0.0
Annuities	4.5	6.8
GICs/BICs	19.7	21.8
International equity	1.9	1.3
International fixed income	0.2	0.0
Alternative investments*	0.1	0.0
Other	10.0	7.4
Union		
Domestic stock	14.3%	12.8%
Domestic fixed income	42.0	34.2
Cash	25.2	31.1
Real estate equity	1.5	2.4
Mortgages	4.1	3.4
Annuities	0.0	0.3
GICs/BICs	12.2	14.0
International equity	0.1	0.0
International fixed income	0.0	0.0
Alternative investments*	0.0	0.0
Other	0.6	1.8

*Composed of venture capital, oil & gas, LBOs and private placements

Thrift/savings	353
403(b)	122
Employer DB contributions	96
Benefit payments	41
Employer DC contributions	21
Internally managed assets	
Total DC	15
Defined benefit asset mix	
Stocks	53%
Fixed income	42%
Cash equivalents	5%
Defined contribution asset mix	
Other stock	9%
Fixed income	7%
GICs/BICs	76%
Cash equivalents	7%
Other	1%

OAKLAND, Calif. — As of Sept. 30, Kaiser Permanente's total employee benefit assets increased 89.9% from a year earlier. Defined benefit assets increased 101% during the same period; defined contribution assets increased 60%.

Equity managers: Domestic — Fred Alger; Delaware; Essex Investment; Husic Capital; Lazard Freres; Wells Fargo Nikko.

Fixed-income managers: Domestic — Criterion Investment; Loomis, Sayles; Miller, Anderson & Sherrerd; T. Rowe Price.

The master trustees are Bankers Trust and Security Pacific.

Key personnel overseeing the investment management of the fund are Janice K. Murphy, vice president and treasurer, and Johann Koo, pension investment coordinator.

Kansas Public Employees Retirement System

	($ millions)
Total assets	4,207
Defined benefit	4,207
Employer DB contributions	105
Benefit payments	233
Hedging devices used	
Bond options	
Fixed-income futures	
Defined benefit asset mix	
Stocks	41.1%
Fixed income	33.3%
Cash equivalents	9%
Real estate equity	10.7%
Direct placements	5.9%

TOPEKA, Kan. — As of Sept. 30, the Kansas Public Employees Retirement System's total employee benefit assets increased 12.2% from a year earlier. All are defined benefit assets.

Equity managers: Domestic — Delaware Investment; Loomis, Sayles; Market Research; Pilgrim, Baxter, Greig; Provident; Wells Fargo Nikko.

International — Alliance; Nomura.

Fixed-income managers: Domestic — Loomis Sayles; PIMCO; Wells Fargo Nikko.

International — Julius Baer.

Real estate managers: Lehndorff and Babson; J.W. O'Connor.

Other managers: Chemical Bank; Pacholder Associates; Payden & Rygel.

The master custodian is Commerce Bank of Topeka; the global custodian is Bankers Trust.

The key person overseeing investment management of the fund is Elizabeth B.A. Miller, investment officer.

Kentucky Retirement Systems

	($ millions)
Total assets	3,900
Defined benefit	3,900
Employer DB contributions	160
Benefit payments	175
Internally managed assets	1,737
Defined benefit asset mix	
Stocks	55%
Fixed income	20%
Cash equivalents	13%
Real estate equity	5%
Mortgages	7%

FRANKFORT, Ky. — As of Sept. 30, the Kentucky Retirement Systems' total employee benefit assets increased 18.2% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Investment Advisers; Investment Counselors of Maryland.

Fixed-income managers: Domestic — National Asset; T. Rowe Price.

Real estate managers: Heitman; TCW; Yarmouth.

The master custodian is Farmers Bank and Capital Trust; the investment consultant is William M. Mercer.

Key personnel overseeing the investment management of the fund are Pamala S. Johnson, general manager, and Marlene O. Castle, investment officer.

Kentucky Teachers' Retirement System

	($ millions)
Total assets	4,501
Defined benefit	4,501
Employer DB contributions	247
Benefit payments	226
Internally managed assets	1,783
Defined benefit asset mix	
Stocks	28%
Fixed income	52%
Cash equivalents	17%
Real estate equity	1%
Mortgages	2%

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FRANKFORT, Ky. — As of Sept. 30, the Kentucky Teachers' Retirement System's total employee benefit assets increased 22.4% from a year earlier. All the assets are defined benefit.

Equity managers: Domestic — Brinson; INVESCO MIM; Todd Investment; and Wellington.

Fixed-income managers: Domestic — National Asset Management and Todd Investment.

The investment consultant is Becker, Burke.

Key personnel overseeing the investment management of the fund are Pat N. Miller, executive secretary, and Stuart A. Reagan, deputy executive secretary.

Eli Lilly and Co.

	($ millions)
Total assets	3,207
Defined benefit	1,557
401(k)	1,650
Employer DB contributions	78
Benefit payments	62
Employer DC contributions	30
Internally managed assets	
Total DC	425
Hedging devices used	
Stock index futures	
Defined benefit asset mix	
Stocks	70%
Fixed income	15%
Cash equivalents	11%
Real estate equity	4%
Defined contribution asset mix	
Company stock	57%
Other stock	10%
GICs/BICs	30%
Cash equivalents	3%

INDIANAPOLIS — As of Sept. 30, Eli Lilly and Co.'s total employee benefit assets increased 20.1% from June 30, 1990. Defined benefit assets increased 11.1% during the same period; defined contribution assets increased 30.1%.

Equity managers: Domestic — Ardsley; Capital Guardian; Mellon Capital; Reams; Reaves; United Capital; Wells Fargo.

International — Nikko and State Street.

Fixed-income managers: Domestic — Reams.

Real estate managers: GE; JMB; and RREEF.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are Frederick W. Ruebeck, director-investments administration; and Karen L. Hardwick, Michael W. Neal and Thomas W. Green, all advisers-investments administration.

Lockheed Corp.

	($ millions)
Total assets*	9,052
Defined benefit	6,306
Total defined contribution	2,746
Thrift/savings	2,746

**P&I estimate*

Defined benefit asset mix	
Stocks	45%
Fixed income	35%
Cash equivalents	11%
Real estate equity	6%
Other	3%

CALABASAS, Calif. — As of Sept. 30, *Pensions & Investments* estimates Lockheed Corp.'s total employee benefit assets increased 13.7%. The estimate is based on $8.309 billion the company reported as of Dec. 31, 1990, and represents a 13.7% increase from an estimated $7.963 billion a year earlier. Defined benefit assets are estimated to have increased 19% during the same period and defined contribution assets, 3%.

Managers: — Alliance Capital; Anhalt/O'Connell; Bankers Trust; Capital Guardian; Chancellor; Delaware Investment; DSI International; First Interstate Bank of Washington; Furman Selz; Hotchkis and Wiley; Investment Research; Thomas L. Karsten; Lombard Odier; Mellon Bank; Mitchell Hutchins; J.P. Morgan; Pacific Financial Research; Payden & Rygel; RREEF; SBC Portfolio; Sarofim Trust; Smith Barney; TCW Asset; UBS Asset; Western Asset; Westwood Management; Wright Investment.

The master trustee and global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are George C. Weintz, investment counsel, and David C. Toth, manager-trust investments.

Los Angeles City Employees' Retirement System

	($ millions)
Total assets	3,095
Defined benefit	3,095
Employer DB contributions	135
Benefit payments	165
Internally managed assets	400
Hedging devices used	
Fixed-income futures	
Defined benefit asset mix	
Stocks	33%
Fixed income	49.8%
Cash equivalents	12.7%
Real estate equity	4.5%

LOS ANGELES — As of Sept. 30, the Los Angeles City Employees' Retirement System's total employee benefit assets increased 18% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Ariel; Bailard, Biehl & Kaiser; Bankers Trust; and Loomis Sayles.

International — Axe Core.

Fixed-income managers: Domestic — Bankers Trust; WR Lazard; Lincoln Capital; and Loomis Sayles.

Top 200 funds with assets in mortgage-backed securities

Defined benefit

Fund	($ millions)
New York City	8,506
California Employees	7,934
New York State & Local	4,720
Wisconsin State	4,277
Ohio Employees	4,100
New Jersey	4,000
Florida State Board	3,167
Ohio Teachers	2,528
Central States Teamsters	2,240
Texas Employees	1,685
New York State Teachers	1,654
South Carolina	1,650
Du Pont	1,474
General Electric	1,335
State of Michigan	1,276
Tennessee Consolidated	1,100
Indiana Employees	1,084
Bethlehem Steel	1,075
Washington State Board	1,063
Colorado Employees	955
Missouri Public Schools	951
USX	940
Ohio School Employees	687
Bell Atlantic	651
General Dynamics	600
Louisiana Teachers	600
Maryland State	600
San Francisco City & County	597
Alabama Retirement	560
Los Angeles County	503
Ohio Police & Fire	380
Pennsylvania State	358
GTE	308
Connecticut Trust	300
Utah State	250
Exxon	223
UMWA	200
Los Angeles Water & Power	194
Grumman	163
New Mexico Employees	157
Boilermakers-Blacksmiths	156
Presbyterian Church	150
Unisys	125
Nevada Employees	118
Idaho Employees	111
Kentucky Teachers	110
Missouri State	109
Commonwealth Edison	100
United Airlines	100
Minnesota Mining & Mfg.	91
Delta Air Lines	87
Bakery & Confectionery	84
TRW	83
Chicago Municipal	70
Tennessee Valley Authority	65
K mart	61
Chrysler	58
Motorola	53
Atlantic Richfield	46
Tenneco	35
Northrop	34
Montana Board	30
S. California UFCW	20
Oregon Employes	17
United Methodists	17
Nat'l Rural Electric Co-op	8
Illinois Municipal	2
Total	**86,985**

Defined contribution

Fund	($ millions)
TIAA-CREF	3,040
General Electric	1,046
Texas County & District	827
Indiana Teachers	670
Evangelical Lutheran Church	400
Halliburton	160
Motorola	160
Bechtel Power	106
Union Carbide	99
AT&T	30
United Methodists	21
Bell Atlantic	19
Delta Air Lines	14
Tennessee Valley Authority	12
Northrop	4
Total	**6,608**

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Real estate managers: AEW; LaSalle; Lehndorff & Babson; O'Connor; RREEF; TA Associates; and TCW Realty.

The master custodian and global custodian is Northern Trust; the investment consultants are SEI and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are Allen Young, general manager; Oscar Peters, assistant manager; and Dan Gallagher, investment officer.

Top 200 funds with assets in venture capital

Defined benefit

Fund	($ millions)
AT&T	533
Washington State Board	376
Bell Atlantic	359
State of Michigan	302
GTE	259
Kansas Employees	249
Los Angeles County	219
General Electric	205
U S WEST	200
California State Teachers	180
University of California	166
Illinois Teachers	128
Pacific Telesis	107
United Technologies	106
Sears, Roebuck	103
Colorado Employees	101
Du Pont	100
Illinois Municipal	95
Connecticut Trust	94
Mass. Teachers/Employees	92
Southwestern Bell	90
Honeywell	84
Pennsylvania Public Schools	77
Chevron	75
Chicago Municipal	73
Delta Air Lines	69
Pennsylvania State	69
S. California Edison	68
Wisconsin State	68
New York State & Local	65
Exxon	64
Prudential Insurance	61
Utah State	60
Virginia	57
Iowa Employees	56
Oregon Employes	53
Aluminum Co. of America	51
Ford Motor	50
Deere	49
California Employees	48
American Electric Power	46
Owens-Illinois	40
World Bank	38
Nat'l Electrical Contractors	35
Atlantic Richfield	34
New York State Teachers	33
Illinois State	30
Missouri State	29
Philip Morris	27
North Carolina	25
Ohio School Employees	25
Ohio Teachers	22
Rhode Island Employees	21
Ohio Employees	20
Xerox	20
Minnesota Mining & Mfg.	18
J.C. Penney	18
TRW	18
Unisys	17
Johnson & Johnson	16
Nevada Employees	15
Ohio Police & Fire	15
San Francisco City & County	15
Hewlett Packard	14
Eli Lilly	12
Grumman	12
Westinghouse Electric	8
Montana Board	7
Illinois Universities	6
BankAmerica	5
Inland Steel	5
Tenneco	5
S. New England Telephone	3
American Airlines	2
Total	**5,917**

Defined contribution

Fund	($ millions)
Hewlett Packard	29
University of California	20
Xerox	2
Total	**51**

Los Angeles County Employees Retirement Association

	($ millions)
Total assets*	11,091
Defined benefit	11,091
Employer DB contributions	351
Benefit payments	516
*as of June 30, 1991	
Defined benefit asset mix	
Stocks	44.1%
Fixed income	39.7%
Cash equivalents	9.5%
Real estate equity	3.9%
Mortgages	0.8%
Venture capital	2%

LOS ANGELES — As of June 30, the Los Angeles County Employees Retirement Association's total employee benefit assets increased 7% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Capital Guardian; INVESCO MIM; Loomis, Sayles; Morgan Stanley; Pilgrim, Baxter, Grieg; Putnam Advisory; Security Pacific Investment; Stein Roe & Farnham; TSA; Weiss, Peck & Greer.

International — Brown Brothers Harriman; Capital Guardian; Daiwa; Morgan Grenfell; UBS Asset Management; Warburg Investment.

Fixed-income managers: Domestic — Bradford & Marzec; Brown Brothers; Capital Guardian; Criterion; J.P. Morgan; Mackay-Shields; Massachusetts Financial.

Real estate managers: Equitable; Goldman Sachs; Heitman; JMB; Lehndorff; Public Storage; RREEF; Sentinel; Shurgard; TCW; Trammell Crow.

Cash manager: Bankers Trust.

Venture capital managers: Copley Venture; GKH; Prudential Equity; Syndicated Communications; TA Communications; E.M. Warburg, Pincus.

The master custodian is Security Pacific National Bank; the global custodian is Chase Manhattan; the investment consultants are Callan Associates; Callan Real Estate Services; The Russell Co.; and Chancellor Capital.

Key personnel overseeing the investment management of the fund are Lee Baker, senior investment officer, fixed income; Sheldon Lieberman, senior investment officer, equity; and Keith Geddis, senior investment officer, real estate.

Los Angeles Fire & Police Pension System

	($ millions)
Total assets	4,220
Defined benefit	4,220
Employer DB contributions	346
Benefit payments	296
Internally managed assets	108
Hedging devices used	
Stock options	
Defined benefit asset mix	
Stocks	60%
Fixed income	33%
Cash equivalents	2%
Real estate equity	3.5%
Mortgages	1.5%

LOS ANGELES — As of Sept. 30, the Los Angeles Fire & Police Pension System's total employee benefit assets increased 22% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Amerindo; Boston Co.; Delta; Frontier; Husic; Loomis, Sayles; and Target Investors.

International — Clay Finlay; Nomura; and Oechsle.

Fixed-income managers: Domestic — Boston Co.; Cypress; Loomis, Sayles; Magten; and Security Pacific.

Real estate managers: Boston Co.; Copley; Equitable; JMB; Prudential; PSI; and Sentinel.

Option managers: Balch, Hardy, Scheinman & Winston; MCQ; and Oppenheimer.

The master custodian and global custodian is Bankers Trust; the investment consultants are Wilshire and Wyatt.

Key personnel overseeing the investment management of the fund are Gary Mattingly, general manager; Allan Moore, assistant general manager; and Dennis Sugino, chief investment officer.

Los Angeles Water & Power Employees' Retirement Plan

	($ millions)
Total assets*	2,165
Defined benefit	2,165
Employer DB contributions	121
Benefit payments	133
*as of June 30, 1991	
Internally managed assets	149
Hedging devices used	
Stock options	
Defined benefit asset mix	
Stocks	40%
Fixed income	53%
Cash equivalents	7%

LOS ANGELES — As of June 30, the Los Angeles Water & Power Employees' Retirement Plan's total employee benefit assets increased 17% from Sept. 30, 1990. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; Merus Capital; and TCW.

Fixed-income managers: Domestic — Boston Co.; Merus Capital; and TCW.

The master trustee is Security Pacific; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Richard W. Goss, retirement plan manager, and Kathleen L. Thornton, assistant retirement plan manager.

The Canadian pension system will be highlighted May 11.

Louisiana State Employees' Retirement System

	($ millions)
Total assets	2,663
Defined benefit	2,663
Employer DB contributions	185
Benefit payments	238
Internally managed assets	447
Defined benefit asset mix	
Stocks	34%
Fixed income	58%
Cash equivalents	4%
Real estate equity	3%
Mortgages	1%

BATON ROUGE, La.— As of Sept. 30, the Louisiana State Employees' Retirement System's total employee benefit assets increased 19.2% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Amerindo; Boston Co.; Eagle Asset; Investment Advisors; Merus; Fayez Sarofim; and J&W Seligman.

Fixed-income managers: Domestic — Denver Investments; Duff & Phelps; and INVESCO.

Real estate managers: Equitable; Heitman; JMB; Lehndorff & Babson; Metropolitan Life; O'Connor; PSI; and TCW.

The master custodian is Bank of New York for bonds and Custodial Trust for equities; the investment consultant is Callan.

The key person overseeing the investment management of the fund is Vernon Strickland, chief investment officer.

Teachers' Retirement System of Louisiana

	($ millions)
Total assets	4,292
Defined benefit	4,292
Employer DB contributions	296
Benefit payments	388
Internally managed assets	429
Defined benefit asset mix	
Stocks	40%
Fixed income	50%
Cash equivalents	10%

BATON ROUGE, La. — As of Sept. 30, the Teachers' Retirement System of Louisiana's total employee benefit assets increased 24.2% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Ashford; Boston Co.; Eagle; INVESCO; Palley-Needelman; Smith Barney, and Sun Bank.

International — Batterymarch and Scudder, Stevens.

Fixed-income managers: Domestic — Boatmen's; Criterion; Hibernia; Kemper; Morgan Stanley; and Scudder, Stevens.

International — Scudder, Stevens.

The master custodian is City National Bank of Baton Rouge; the global custodian is Chase Manhattan; the investment consultant is Holbein & Associates.

Key personnel overseeing the investment management of the fund are James Hadley, director, and Jennifer Netterville, investment officer.

Managers Scoreboard: Feb. 3.

British Gas

NYSE: BRG

HALF-YEAR RESULTS
and
SPECIAL DIVIDEND
ANNOUNCED

FIRST-HALF RESULTS (ended September 30)	1991	1990
Sales (£mm)	3,530	2,955
Operating Profit (£mm)*	67	85
Net Income (Loss) (£mm)	(32)	24
Earnings (Loss) per Ordinary Share (pence)	(0.8)	0.6
Net Income (US GAAP) (£mm)	87	140

*The greater portion of profit is generated in the second half of the fiscal year due to the seasonal nature of the company's gas utility business.

DIVIDEND	1991	1990
Interim per Ordinary Share (pence)	4.25	3.75
Special per Ordinary Share (pence)*	6.0	–

*British Gas has announced its fiscal year-end date will change from March 31 to December 31. The 1991 fiscal period ended on December 31, 1991. The board expects to recommend a special final dividend of six pence per share in February 1992, at the time of announcing the results for the nine months ended December 31, 1991.

For a British Gas plc interim report, write or call:

Mr. Frederick J. Fajardo
Gavin Anderson Doremus & Company
11 West 42nd Street, New York, NY 10036
(212) 921-1060

M

Maine State Retirement System

	($ millions)
Total assets	2,311
Defined benefit	2,311
Employer DB contributions	169
Benefit payments	183
Defined benefit asset mix	
Stocks	56%
Fixed income	39%
Cash equivalents	2%
Real estate equity	3%

AUGUSTA, Maine — As of Sept. 30, the Maine State Retirement System's total employee benefit assets increased 25.8% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Columbus Circle; Geo Capital; Gouws; Lehman Ark; PanAgora; Peregrine.

International — Bankers Trust; State Street Bank.

Fixed-income managers: Domestic — Alliance; Boston Safe; Morgan Guaranty; PanAgora; Putnam.

Real estate manager: PCA.

Oil & gas manager: First Reserve.

The master custodian is Boston Safe; the global custodians are Bankers Trust and State Street Bank; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Claude R. Perrier, executive director, and William B. Ross, investment account coordinator.

Martin Marietta Corp.

	($ millions)
Total assets	3,644
Defined benefit	2,434
Total defined contribution	1,210
Employer DB contributions	111
Benefit payments	100
Employer DC contributions	18
Internally managed assets	
Total DB	1,061
Defined benefit asset mix	
Stocks	26%
Fixed income	24%
Cash equivalents	50%
Defined contribution asset mix	
Company stock	9%
Other stock	24%
GICs/BICs	25%
Cash equivalents	42%

BETHESDA, Md. — As of Sept. 30, Martin Marietta Corp.'s total employee benefit assets increased 10.4% from a year earlier. Defined benefit assets increased 8.3% during the same period; defined contribution assets — a profit-sharing plan with a 401(k) feature — increased 15%.

Equity managers: Domestic — Breau; Capital Guardian; Invista; Pioneering; State Street Research; Robert E. Torray.

Fixed-income managers: Domestic — T. Rowe Price.

The master trustee and global custodian is Bankers Trust; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Wayne H. Shaner, assistant treasurer; Shawn M. Hendon, director, pension investments; and Karen D. Hummers, analyst, pension investments.

Maryland State Retirement and Pension Systems

	($ millions)
Total assets	13,200
Defined benefit	13,200
Employer DB contributions	640
Benefit payments	610
Internally managed assets	8,100
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	36%
Fixed income	59%
Cash equivalents	3%
Real estate equity	2%

BALTIMORE — As of Sept. 30, the Maryland State Retirement and Pension Systems' total employee benefit assets increased 22.7% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Capital Guardian; Dimensional Fund; Hagler, Mastrovita & Hewitt; Investment Counselors of Maryland; Scudder; Wellington.

International — BEA; Bank of Ireland; State Street Bank.

Fixed-income managers: Domestic — Investment Counselors of Maryland; Mercantile Safe; PIMCO; Progress; Standish, Ayer & Wood.

Real estate managers: Alex. Brown/Kleinwort; CIGNA; Copley; J.P. Morgan; Sentinel.

Other managers: Maryland Venture Capital Trust.

The master custodian is First National Bank of Maryland.

Key personnel overseeing the investment management of the fund are Carol Casey, chief investment officer; Lawrence J. Bach, director, passive management; Arthur M. Lynch Jr., director, actively managed assets; and Victoria Willard, director, cash management.

Commonwealth of Massachusetts Pensions Reserves Investment Management Board

	($ millions)
Total assets	3,200
Asset mix	
Domestic stocks	39.6%
International stocks	15.6%
Domestic fixed income	22%
International fixed income	2.1%
Cash equivalents	2.1%
Real estate equity	8.5%
Venture capital	3.4%
Other	6.7%

BOSTON — As of Sept. 30, Commonwealth of Massachusetts Pensions Reserves Investment Management Board's total assets increased 18.5% from a year earlier.

Equity managers: Domestic — Alliance Capital; Bear Stearns; Lazard Freres; PanAgora; U.S. Trust.

international — Acadian; Baring International; Capital Guardian; Daiwa; Emerging Markets; GE Investments; HD International; Nomura; Oechsle; Scudder, Stevens & Clark; and State Street Bank.

Global — TCW Global.

Fixed-income managers: Domestic

Top 200 defined benefit funds with assets in non-investment grade bonds

Fund	($ millions)
Pennsylvania State	376
California Employees	312
Los Angeles Fire & Police	217
Connecticut Trust	200
State of Michigan	193
UMWA	150
Xerox	123
San Francisco City & County	120
General Electric	115
USX	100
Tennessee Valley Authority	91
Bell Atlantic	80
United Airlines	80
Montana Board	75
Monsanto	65
U S WEST	62
New York State Teachers	41
Central States Teamsters	40
Atlantic Richfield	38
Presbyterian Church	30
Missouri State	16
Mississippi Employees	11
Boeing	5
Hospital/Healthcare	2
Westinghouse Electric	1
Total	**2,543**

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— AEW/Worcester; Equitable Capital; Fidelity Management; W.R. Huff; Lehman Ark; One Federal Asset; PIMCO; Putnam; Standish, Ayer & Wood; TCW.

International — Baring International and N.M. Rothschild.

Real estate managers: Domestic — Advent Realty; AEW; Boston Financial; Copley; FNB Boston; John Hancock; Heitman; INVESCO; JMB; Massachusetts Mutual; and TCW Realty.

International — JMB.

Venture capital managers: Domestic — Commonwealth Bioventures; Davis Venture; Golder, Thoma & Cressey; John Hancock; Morgan Holland; M.T.D.C.; S.C.V. Partners; T.A. Associates; Venture Capital of New England; and Vista.

International — Advent International; APA Ventures; and John Hancock International.

Special equity managers: Domestic — Boston Ventures; Forstmann Little; INVEXCO; KKR; Thomas H. Lee; Joseph, Littlejohn & Levy; Smith Offshore; and Weintraub.

International -- Advent; MMG Patricoff; and Schroder U.K.

The master trustee and global custodian is State Street Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Paul V. Doane, executive director, and Philip D. Kett, chief investment officer.

Massachusetts State Teachers' and Employees' Retirement System

	($ millions)
Total assets	6,591
Defined benefit	5,979
457	612
Employer DB contributions	310
Employer DC contributions	0
Internally managed assets	
Total DB	3,338
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	

BOSTON — As of Sept. 30, the Massachusetts State Teachers' and Employees Retirement System's total employee benefit assets decreased 0.9% from the amount listed in Money Market Directory as of June 30, 1990.

Equity managers: Domestic — Boston Co.; Chancellor; Equitable Capital; Fidelity Management; Goldman Sachs; Greaves; Independence; Massachusetts Financial; Morgan Stanley; Numeric.

International — Guiness Mahon; Jarislowsky Fraser; Lombard Odier; Wardley.

Fixed-income managers: Domestic — Loomis, Sayles.

International — BB Investment; Credit Suisse; Equitilink; Massachusetts Financial.

Real estate managers: Aetna; AEW; Bear Stearns; Brinson; Copley; Franklin Properties; Hancock; Lehndorff & Babson; Meridian; Metric; PSI; Prudential; Shurgard; Sierra Capital; Sterling; TA Associates.

Balanced managers: Bailard, Biehl & Kaiser; Guiness Mahon; RXR.

Venture capital managers: Beta; Bigler; Clayton & Dubilier; Frontenac; Hancock Venture; Narragansett; New Enterprises; Prudential; TA Communications; Thomas H. Lee; Vista; Welsh, Carson, Anderson & Stowe.

Hedging manager: Cambridge.

Other managers: Massachusetts Financial; Prudential; Sentry.

The master and global custodian is State Street Bank; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Steven Kaseta, deputy treasurer; Mark Baker, chief investment analyst; and Alan West, chief investment officer.

McDonnell Douglas Corp.

	($ millions)
Total assets	6,800
Defined benefit	4,952
Total defined contribution	1,848

ST. LOUIS — As of Sept. 30, McDonnell Douglas Corp.'s total employee benefit assets were $6.8 billion.

Key personnel overseeing the investment management of the fund are Sheryl K. Pressler, director, and Patricia A. Dahl, investment analyst.

Metropolitan Life Insurance Co.

	($ millions)
Total assets	3,857
Defined benefit	2,608
Defined contribution	1,249
Employer DB contributions	0
Benefit payments	136
Employer DC contributions	39
Internally managed assets	
Total DB	2,608
Total DC	1,249
Defined benefit asset mix	
Stocks	39%
Fixed income	50%
Real estate equity	11%
Defined contribution asset mix	
Other stock	18%
BICs/GICs	81%
Equity real estate	1%

NEW YORK — As of Sept. 30, Metropolitan Life Insurance Co.'s total employee benefit assets increased 13.6% from a year earlier. Defined benefit assets increased 8.5% during the same period; defined contribution assets — in a thrift/savings plan with a 401(k) feature and a VDEC — increased 25.9%.

All assets are managed internally.

State of Michigan Retirement Systems

	($ millions)
Total assets	20,120
Defined benefit	20,120
Employer DB contributions	1,000
Benefit payments	1,100
Internally managed assets	18,910
Hedging devices used	
Stock index futures	
Defined benefit asset mix	

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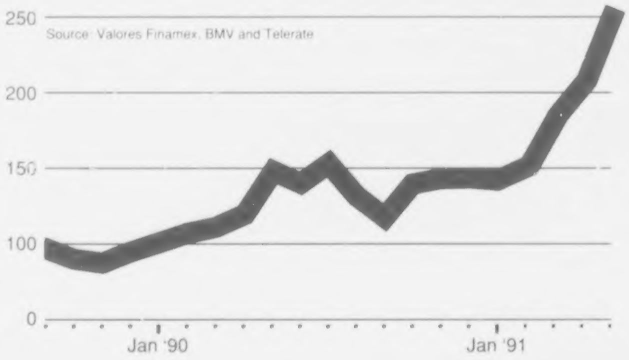

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VALORES FINAMEX INTERNATIONAL INC

Stocks	34%
Fixed income	31%
Cash equivalents	20%
Real estate equity	6%
Mortgages	5%
Other	4%

LANSING, Mich. — As of Sept. 30, the State of Michigan Retirement Systems' total employee benefit assets increased 16.5% from a year earlier. All assets are defined benefit.

Real estate managers: AEW; Copley; Lehndorff & Babson; L.E.T.; NBD Mortgage; Sentinel; Trammell Crow; Zell/Merrill Lynch.

Venture capital and LBO managers: Accel; Battery; Berkshire; Burr, Egan, Deleage; Enterprise; Frontenac; Great Lakes; S/L Health Care; Inter Ven; KKR; Marquette; MBW; Menlo; MLGA; Morgan Holland; Newtek; Plant Resources; Regional Financial; Robertson, Colman & Stephens; Sunwestern; Warburg, Pincus; Wind Point.

Key personnel overseeing the investment management of the fund are Barry L. Stevens, director-Bureau of Investments; and Gordon H. Linsday, deputy director-Bureau of Investments.

Minnesota Mining & Manufacturing Co.

	($ millions)
Total assets	4,102
Defined benefit	2,884
Total defined contribution	1,218
401(k)	1,050
Thrift/savings	9
ESOP	57
Other	102
Employer DB contributions	41
Benefit payments	105
Internally managed assets	
Total DB	26
Total DC	141
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	59.4%
Fixed income	28.5%
Cash equivalents	2%
Real estate equity	5.8%
Other	4.3%
Defined contribution asset mix	
Company stock	27.2%
Other stock	22.7%
Fixed income	11.6%
GICs/BICs	38.5%

ST. PAUL, Minn. — As of Sept. 30, Minnesota Mining & Manufacturing Co.'s total employee benefit assets increased 24.8% from a year earlier. Defined benefit assets increased 21.5% during the same period; defined contribution assets increased 33.1%.

Equity managers: Domestic — Advanced Investment; Alliance; Ashland; Boston Co.; Cursitor-Eaton; Dietche & Field; Grantham Mayo Van Otterloo; Investment Research; Mellon Capital; Fayez Sarofim; Trinity; ValueQuest.

International — Grantham Mayo Van Otterloo; Schroder.

Fixed-income managers: Domestic — Hoisington; Mellon Capital; New Amsterdam; PIMCO; Sun Life.

Real estate managers: Citibank; Equitable; JMB; RCB; RREEF; Schroder; TCW.

Other managers: Allen Value; Forstmann Little; HLM; Oak; Olympus; Summit; Triumph; Zell-Chilmark.

The master trustee and global custodian is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund are Jan Yeomans, director-benefit funds and financial markets; Deborah Weiss, manager-benefit funds investment; and Raj Kang, senior pension analyst.

Minnesota State Board of Investment

	($ millions)
Total assets	15,105
Defined benefit	14,568
Total defined contribution	537
Other	537
Internally managed assets	
Total DB	6,224
Total DC	81
Defined benefit asset mix	
Stocks	38.6%
Fixed income	52.2%
Cash equivalents	2.5%
Real estate equity	4%
Other	2.7%
Defined contribution asset mix	
Stock	50.2%
Fixed income	16.9%
GICs/BICs	12.3%
Cash equivalents	20.6%

ST. PAUL, Minn. — As of Sept. 30, the Minnesota State Board of Investment's total employee benefit assets increased 24.9% from a year earlier. Defined benefit assets increased 25% during the same period; defined contribution assets increased 20.1%.

Equity managers: Alliance; Forstmann-Leff; Franklin Portfolio; GeoCapital; IDS Advisory; Investment Advisers; Lieber; Rosenberg Institutional; Waddell & Reed; Wilshire.

Fixed-income managers: Domestic — Fidelity Management; Investment Advisers; Lehman Ark; Lincoln Capital; Miller, Anderson Sherrerd; Western Asset.

Real estate managers: Aetna; Equitable; Heitman; LaSalle; RREEF; State Street Bank; TCW; Zell-Chilmark.

Venture capital managers: Allied; DSV Management; First Chicago; Golder, Thoma & Cressey; Inman & Bowman; IAI Venture; KKR; Matrix; Norwest Venture; Smith Barney Venture; Stamps, Woodsum; T. Rowe Price; ZC Limited Partnership.

Resource funds managers: Apache; British Petroleum; First Reserve; J.P. Morgan.

The master custodian is State Street; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are Howard J. Bicker, executive director, and Beth Lehman, assistant executive director.

Public Employees Retirement System of Mississippi

	($ millions)
Total assets	5,420
Defined benefit	5,420
Employer DB contributions	265
Benefit payments	258
Defined benefit asset mix	
Stocks	40%
Fixed income	58%
Cash equivalents	2%

JACKSON, Miss. — As of Sept. 30, the Public Employees Retirement System of Mississippi's total employee benefit assets increased 25.5% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; DFA; GEOCapital; INVESCO; Fayez Sarofim; Sun Bank.

International — Brinson; Lazard Freres; Scudder, Stevens & Clark.

Fixed-income managers: Domestic — Brinson; Criterion; Dreyfus; Mellon Bond; Morgan Grenfell; Pacific Investment Management; Wells Fargo Nikko.

The master custodian is Trustmark National Bank; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Eddie B. Vandiver, deputy director-investments; Ronald D. Logan, investment manager; and Lorrie Tingle, investment analyst.

Public School Retirement System of Missouri

	($ millions)
Total assets*	5,861
Defined benefit	5,861
Employer DB contributions	168
Benefit payments	229

*as of June 30, 1991

Defined benefit asset mix	
Stocks	18.3%
Fixed income	74.3%
Cash equivalents	6.9%
GICs/BICs	0.5%

JEFFERSON CITY, Mo. — As of June 30, the Public School Retirement System of Missouri's total employee benefit assets increased 1% from a year earlier. All assets are defined benefit.

Balanced managers: Boatmen's Trust; Loomis, Sayles; United Missouri.

The master custodian is Boatmen's Trust; the investment consultant is DeMarche.

The key person overseeing the investment management of the fund is David W. Mustoe, executive secretary.

Missouri State Employees' Retirement System

	($ millions)
Total assets	1,905
Defined benefit	1,905
Employer DB contributions	112
Benefit payments	68
Internally managed assets	111
Defined benefit asset mix	
Stocks	50%
Fixed income	42%
Real estate equity	5%
Mortgages	1%
Venture capital	2%

JEFFERSON CITY, Mo. — As of Sept. 30, the Missouri State Employees' Retirement System's total employee benefit assets increased 24% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; CFW; Delaware; General American Investment; Shields; Twentieth Century.

Fixed-income managers: Domestic — Boatmen's Trust; Loomis, Sayles; Mississippi Valley; United Missouri.

Other managers: Brinson Partners.

The master custodian is Boatmen's Trust; the investment consultant is Asset Consulting Group.

Key personnel overseeing the investment management of the fund are M. Steve Yoakum, executive director; John Brandt, senior investment analyst; and Kent Baur, investment analyst.

Mobil Oil Corp.

	($ millions)
Total assets	5,426
Defined benefit	2,533
Total defined contribution	2,893
Employer DB contributions	0
Benefit payments	0.2
Employer DC contributions	0.1
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	52%
Fixed income	37%
Cash equivalents	2%
Other	9%
Defined contribution asset mix	
Company stock	51%
Other stock	7%
Fixed income	1%
GICs/BICs	31%
Cash equivalents	7%
Participant loans	3%

FAIRFAX, Va. — As of Sept. 30, Mobil Oil Corp.'s total employee benefit assets increased 16.1% from a year earlier. Defined benefit assets increased 15.1% during the same period; defined contribution assets — in a combined savings, 401(k), ESOP plan — increased 16.9%.

Equity managers: Domestic — Alliance; Capital Guardian; Jennison; Fayez Sarofim; Wells Fargo Nikko.

International — Grantham, Mayo; Morgan Stanley; Oechsle.

Global — Brinson; Capital Guardian; Templeton.

Fixed-income managers: Domestic — Criterion; Henry Kaufman; Loomis, Sayles; J.P. Morgan; PIMCO; State Street Research.

International/global — Brinson; Putnam; WorldInvest.

GIC managers: Connecticut General; Continental National; Hancock; Metropolitan Life; Prudential.

Asset allocation managers: Bridgewater; First Quadrant; TSA.

Cash managers: Bankers Trust and United States Trust.

For the defined benefit plan, the master trustee is United States Trust Co. of New York; the global custodians are U.S. Trust and Morgan Stanley Trust; and the investment management consultant is Evaluation Associates. For the defined contribution plan, Bankers Trust is master trustee.

Key personnel overseeing the investment management of the fund are Robert B. Hahnen, manager, corporate benefits-finance, and Daniel J. Lynch, assistant manager, corporate benefits-finance.

Monsanto Co.

	($ millions)
Total assets	4,500
Defined benefit	3,100
401(k)	1,400
Employer DB contributions	0
Benefit payments	187
Employer DC contributions	30
Internally managed assets	
Total DB	67
Hedging devices used	
Stock options	

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- linking prepayments to interest rate generation models
- analyzing short payers and CMO swaps

Asset Performance and Surplus Control
- surplus management
- shortfall constraints
- definition of a "risk-adjusted" surplus measure

Pension Portfolio Management
- managing a diversified pension portfolio
- diversified fixed income asset classes
- adding value through active management

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Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	65%
Fixed income	24%
Cash equivalents	3%
Real estate equity	8%
Defined contribution asset mix	
Company stock	39%
Other stock	8%
GICs/BICs	50%
Participant loans	3%

ST. LOUIS — As of Sept. 30, Monsanto Co.'s total employee benefit assets increased almost 11% from a year earlier. Defined benefit assets increased 4.8% during the same period; defined contribution assets increased 27.7%.

The master trustee and global custodian is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Alwyn E. Wolfarth, director-pension asset management, and Pamela S. Moench, manager-pension asset management.

Montana Board of Investments

	($ millions)
Total assets*	2,024
Defined benefit	2,024

*as of June 30, 1991

Internally managed assets	1,996
Defined benefit asset mix	
Stocks	21.8%
Fixed income	63.2%
Cash equivalents	6.7%
Mortgages	5.9%
Venture capital	0.3%
LBOs	1.1%
Convertibles	1%

HELENA, Mont. — As of June 30, the Montana Board of Investments' total employee benefit assets increased 10.9% from a year earlier. All assets are defined benefit.

LBO manager: KKR.

Venture capital manager: Brinson.

The master custodian is Chase.

Key personnel overseeing the investment management of the fund are James R. Penner, investment officer; Fred Godbout, assistant-equities; Robert Bugni, assistant-fixed income and alternative equities; and Ed Kelly, assistant-short-term investments.

Motorola Inc.

	($ millions)
Total assets	2,492
Defined benefit	695
Defined contribution	1,797
PAYSOP	33
Other	1,764
Employer DB contributions	8
Benefit payments	11
Employer DC contributions	19
Hedging devices used	
Bond options	
Fixed-income futures	
Defined benefit asset mix	
Stocks	62%
Fixed income	38%
Defined contribution asset mix	
Company stock	7%
Other stock	40%
Fixed income	53%

SCHAUMBURG, Ill. — As of Sept. 30, Motorola Inc.'s total employee benefit assets increased 23.4% from a year earlier. Defined benefit assets increased 29.4% during the same period; defined contribution assets, most of which are in a combined profit-sharing/401(k) plan, increased 21.3%.

Equity managers: Domestic — Capital Guardian; Delaware; Harris Investment; Jennison; Lehman Ark; and Lincoln Capital.

International — Brinson and Morgan Grenfell.

Fixed-income managers: Domestic — Harris Investment; Scudder, Stevens & Clark; Stein Roe & Farnham; and Weiss Peck & Greer.

Harris Trust is master trustee and global custodian for the defined benefit plan; Northern Trust is master trustee and global custodian for the defined contribution plan.

The key person overseeing the investment management of the fund is William H.S. Preece.

N

National Electrical Contractors Association-International Brotherhood of Electrical Workers

	($ millions)
Total assets	4,308
Defined benefit	4,046
401(k)	262
Employer DB contributions	171
Benefit payments	212
Employer DC contributions	30
Defined benefit asset mix	
Stocks	34%
Fixed income	34%
Cash equivalents	6%
Real estate equity	9%
GICs/PICs	3%
Mortgages	11%

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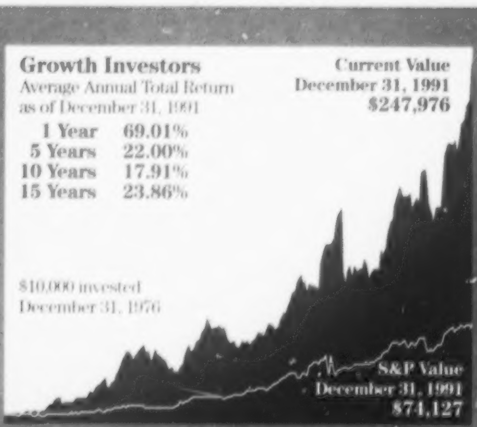

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Other	3%
Defined contribution asset mix:	
Other stock	21%
Fixed income	34%
GICs/BICs	13%
Cash equivalents	19%
Real estate	13%

WASHINGTON — As of Sept. 30, National Electrical Contractors Association — International Brotherhood of Electrical Workers' total employee benefit assets increased 16.7% from a year earlier. Defined benefit assets increased 16.3% during the same period; defined contribution assets increased 23%.

The master trustee is Boston Safe; the investment consultant is Marco.

Key personnel overseeing the investment management of the fund are Jack Moore and John Grau, trustees, and Roy Dickinson, executive assistant.

National Rural Electric Cooperative Association

	($ millions)
Total assets	2,497
Defined benefit	1,809
401(k)	688
Internally managed assets:	
Total DB	826
Total DC	199
Defined benefit asset mix:	
Stocks	54%
Fixed income	35%
Cash equivalents	11%
Defined contribution asset mix:	
Stock	29%
Fixed income	18%
GICs/BICs	9%
Cash equivalents	44%

WASHINGTON — As of Sept. 30, the National Rural Electric Cooperative Association's total employee benefit assets increased 17.8% from a year earlier. Defined benefit assets increased 13% during the same period; defined contribution assets increased 32.6%.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Capital Guardian; Chesapeake.

International — Grantham, Mayo, Van Otterloo and J.P. Morgan.

Fixed-income managers: Domestic — Lincoln Income Group.

The master trustee and global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are Peter R. Morris, executive director-investments; Stuart E. Teach, senior equity portfolio manager; and Douglas G. Kern, senior fixed-income portfolio manager.

Navistar International Transportation Corp.

	($ millions)
Total assets	2,159
Defined benefit	2,109
401(k)	53
Employer DB contributions	0
Benefit payments	233
Employer DC contributions	11
Defined benefit asset mix:	
Fixed income	92%
Cash equivalents	7%
GICs/BICs	1%
Defined contribution asset mix:	
Company stock	10%
GICs/BICs	59%
Cash equivalents	31%

CHICAGO — As of Sept. 30, Navistar International Transportation Corp.'s total employee benefit assets increased 7.7% from a year earlier. Defined benefit assets increased 7% during the same period; defined contribution assets increased 45.6%.

Fixed-income managers: Domestic — Jennison and J.P. Morgan.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are Terry Endsley, director of pension and corporate finance, and Robert Lannert, executive vice president and chief financial officer.

NCR Corp.

	($ millions)
Total assets	2,032
Defined benefit	1,600
Total defined contribution	432
Profit-sharing	74
Thrift/savings	325
PAYSOP	33

DAYTON, Ohio — As of Sept. 30, NCR Corp.'s total employee benefit assets increased 19.5% from a year earlier. Defined benefit assets increased 17.6% during the same period; defined contribution assets increased 27%.

Equity managers: Domestic — Columbus Circle; INVESCO MIM; Newbold's; Wells Fargo Nikko.

International — Wells Fargo Nikko.

Fixed-income manager: Domestic — J.P. Morgan.

Real estate manager: Equitable.

The master trustee is Citibank.

The key person overseeing the investment management of the fund is Norman M. Pao, assistant treasurer.

Public Employees Retirement System of Nevada

	($ millions)
Total assets	4,169
Defined benefit	4,169
Employer DB contributions	300
Benefit payments	141

Hedging devices used:
Stock options
Bond options

Defined benefit asset mix:	
Stocks	39.5%
Fixed income	49.7%
Cash equivalents	0.2%
Real estate equity	8.5%
Mortgages	1.7%
Venture capital	0.4%

CARSON CITY, Nevada — As of Sept. 30, the Public Employees Retirement System of Nevada's total employee benefit assets increased 26% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; INVESCO; Wells Fargo Nikko.

International — Axe Core.

Fixed-income managers: Domestic — Criterion; Patterson Capital; Putnam; State Street Research.

International — Brinson.

Real estate managers: JMB; Lehndorff & Babson; J.P. Morgan; PMRealty; Prudential; TCW.

Other managers: Balch Hardy Scheinman; Bay Partners; Columbine; Domain; El Dorado; Golder, Thoma; Heitman; Loomis, Sayles; LTOS; Menlo; Sequor Group; Summit.

The master custodian is Security Pacific; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Laura B. Wallace, investment officer, and Peggy I. Clark, investment analyst.

State of New Jersey Division of Investment

	($ millions)
Total assets	31,280
Defined benefit	31,000
457 and 403(b)	280
Employer DB contributions	900
Benefit payments	400
Internally managed assets:	
Total DB	31,000
Total DC	280
Defined benefit asset mix:	
Stocks	50%
Fixed income	48%
Cash equivalents	2%
Defined contribution asset mix:	
Stocks	43%
Fixed income	28.5%
Cash equivalents	28.5%

TRENTON, N.J. — As of Sept. 30, the State of New Jersey Division of Investments' total employee benefit assets increased 17.6% from June 30, 1990. Defined benefit assets increased 17.7% during the same period; defined contribution assets increased 2.2%.

All assets are managed internally.

The master custodians are: First Fidelity, Midlantic, CoreStates and Bankers Trust. The global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are Roland M. Machold, director; Anthony A. Arcuni, deputy director; and Stephen A. Kornrumpf, assistant director.

New Mexico Educational Retirement Board

	($ millions)
Total assets	2,426
Defined benefit	2,426
Employer DB contributions	85
Benefit payments	121
Internally managed assets	2,426
Defined benefit asset mix:	
Stocks	18%
Fixed income	79%
Cash equivalents	3%

SANTA FE, N.M. — As of Sept. 30, the New Mexico Educational Retirement Board's total employee benefit assets increased 21.9% from a year earlier. All assets are defined benefit.

Wellington Management advises on investments. The master custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are John E. Young, chief investment officer; and Sharon L. Scrogham, investment officer.

New Mexico Public Employees' Retirement Association

	($ millions)
Total assets	2,386
Defined benefit	2,336

Top 200 funds with defined benefit assets in indexed equities and bonds

($ millions)

Fund	Total	Indexed equities	Indexed bonds
New York City	35,929	16,166	19,763
California State Teachers	29,601	12,323	17,278
New York State & Local	18,246	18,246	0
California Employees	17,947	17,947	0
New York State Teachers	17,165	17,165	0
AT&T	14,776	10,285	4,491
Florida State Board	12,042	8,175	3,867
Los Angeles County	7,694	3,928	3,766
NYNEX	5,266	3,894	1,372
Central States Teamsters	4,971	1,459	3,512
General Electric	4,970	4,970	0
Washington State Board	4,631	3,615	1,016
Maryland State	4,400	3,200	1,200
Ford Motor	4,200	3,900	300
Minnesota State	4,193	3,066	1,127
Arizona State	3,896	2,077	1,819
Du Pont	3,679	3,679	0
Pennsylvania State	3,386	2,678	708
Western Teamsters	3,325	2,314	1,011
Southwestern Bell	2,719	2,719	0
Mississippi Employees	2,575	979	1,596
Colorado Employees	2,522	2,522	0
Exxon	2,248	1,592	656
Rhode Island Employees	2,211	1,347	864
Indiana Employees	2,075	0	2,075
North Carolina	1,909	1,909	0
Illinois Universities	1,830	1,470	360
Oklahoma Teachers	1,762	648	1,114
Virginia	1,740	1,740	0
Kentucky Retirement	1,695	1,200	495
Operating Engineers	1,603	571	1,032
Episcopal Church	1,573	1,071	502
Iowa Employees	1,530	872	658
Chrysler	1,442	1,034	408
Hospital/Healthcare	1,381	813	568
UMWA	1,360	815	545
Connecticut Trust	1,261	1,261	0
United Technologies	1,248	1,248	0
Pacific Telesis	1,232	1,232	0
J.C. Penney	1,226	1,226	0
Deere	1,205	1,205	0
Westinghouse Electric	1,190	645	545
U S WEST	1,186	1,186	0
Ohio School Employees	1,169	1,169	0
Illinois Municipal	1,161	698	463
Philip Morris	1,153	1,153	0
Illinois Teachers	1,101	780	321
Nevada Employees	1,101	1,101	0
Utah State	1,000	1,000	0
State of Michigan	977	977	0
Los Angeles City	965	550	415
Commonwealth Edison	963	963	0
Tenneco	941	670	271
Raytheon	886	886	0
GTE	882	882	0
Maine State	878	600	278
Pacific Gas & Electric	826	826	0
Tennessee Valley Authority	789	789	0
Texas Employees	775	775	0
Chevron	728	447	281
Kentucky Teachers	711	220	491
Los Angeles Fire & Police	701	701	0
Sears, Roebuck	695	695	0
World Bank	690	690	0
Nat'l Electrical Contractor	679	679	0
Prudential Insurance	639	483	156
New Mexico Employees	635	635	0
San Francisco City & County	618	618	0
Mass. Teachers/Employees	610	610	0
S. New England Telephone	598	385	213
Kansas Employees	541	241	300
Georgia Teachers	540	540	0
Georgia-Pacific	526	384	142
Idaho Employees	526	328	198
Travelers	525	455	70
Alaska State	508	508	0
Presbyterian Church	434	434	0
Kaiser Permanente	415	415	0
PPG Industries	411	411	0
Ohio Police & Fire	407	407	0
Amoco	400	400	0
Honeywell	374	374	0
Minnesota Mining & Mfg.	373	314	59
Anheuser-Busch	342	294	48
TRW	339	262	77
Aluminum Co. of America	338	312	26
Unisys	329	329	0
United Parcel Service	323	323	0
FPL Group	309	127	182
GenCorp	296	296	0
Caterpillar	291	291	0
S. California UFCW	287	287	0
Alabama Retirement	266	266	0
Cooper Industries	265	265	0
CIGNA	242	206	36
Citibank	239	239	0
United Airlines	235	235	0
Bakery & Confectionery	219	133	86
Boeing	200	200	0
Eli Lilly	193	193	0
United Methodists	181	156	25
Delta Air Lines	179	179	0
Monsanto	160	160	0
Southern Co.	156	156	0
General Dynamics	155	155	0
New York Life	155	102	53
K mart	144	144	0
Nat'l Rural Electric Co-op	131	0	131
Boilermakers-Blacksmiths	114	114	0
Hawaii State	109	109	0
Missouri State	109	109	0
American Electric Power	103	103	0
Phillips Petroleum	102	102	0
Johnson & Johnson	100	100	0
BankAmerica	92	92	0
Xerox	81	81	0
Procter & Gamble	80	42	38
Motorola	70	70	0
Inland Steel	58	58	0
Owens-Illinois	52	52	0
Aetna Life	51	51	0
S. California Edison	50	50	0
Mobil Oil	5	5	0
Southern Baptist Convention	5	5	0
Total	**277,046**	**200,038**	**77,008**

457	50
Employer DB contributions	99
Benefit payments	104
Employer DC contributions	0
Internally managed assets	
Total DB	110
Defined benefit asset mix	
Stocks	39.5%
Fixed income	58.9%
Cash equivalents	1.3%
Real estate equity	0.2%
Mortgages	0.1%
Defined contribution asset mix	
Other stock	10%
Fixed income	10%
GICs/BICs	80%

SANTA FE, N.M. — As of Sept. 30, the New Mexico Public Employees' Retirement Association's total employee benefit assets increased 28.3% from a year earlier. Defined benefit assets increased 25.6% during the same period.

Equity managers: Bankers Trust; Smith Barney.

Fixed-income managers: Brown Brothers Harriman; Criterion; and Wentworth Hauser & Violich.

The master custodian is Bankers Trust; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Vern H. Curtis, director of investments, and Carlos Gallegos, executive secretary.

New York City Retirement Systems

	($ millions)
Total assets	48,876
Defined benefit	48,876
Employer DB contributions	1,848
Benefit payments	3,750
Internally managed assets	1,121
Defined benefit asset mix	
Stocks	53%
Fixed income	42%
Cash equivalents	2%
GICs/BICs	3%

NEW YORK — As of Sept. 30, New York City Retirement Systems' total employee benefit assets increased 19.9% from a year earlier. All assets are defined benefit.

The New York City comptroller's office oversees all investments for the New York City Employees', the Fire Department and the Police Department Retirement systems; and fixed-income investments for the Teachers' and the Board of Education systems. The Teachers' system oversees its GIC and equity investments and the equity investments of the Board of Education system.

The total and defined benefit asset figures are for the combined funds. All other figures are for the funds controlled by the comptroller's office only.

Equity managers: Domestic — Amerindo; Bankers Trust; Bear Stearns; Fidelity Management; Investment Advisors; Lazard Freres; Montgomery; Oppenheimer; J&W Seligman; TCW; and Zevenbergen.

International — Capital Guardian; Clay Finlay; Clemente; Schroder; and Scudder, Stevens & Clark.

Fixed-income managers: Domestic — Bankers Trust; BEA; Bear Stearns; Executive Investment; Fiduciary Management; Fischer, Francis Trees & Watts; Investment Advisers; Kennedy Associates; WR Lazard; Lehman Ark; Lincoln Capital; Mellon Bond; Miller Anderson & Sherrerd; Mitchell Hutchins; NCM Capital; PIMCO; T. Rowe Price; Putnam; RCM Capital; Smith Barney; State Street; Taplin, Canida & Habacht; Weiss, Peck & Greer; and Wells Fargo.

International — T. Rowe Price.

The following firms are employed by the Teachers' Variable Fund:

Equity managers: Domestic — Axe-Core Investors; Bankers Trust; Beal; Fidelity; Goldman Sachs; John Levin; Mellon; PanAgora; Prudential; Roll & Ross; Rosenberg Institutional; Sound Shore; Sturdivant; and Wells Fargo Nikko.

The master trustees are Citibank and Bank of New York. The investment consultants are Callan; SEI; EAI; Buck; and Rogers Casey.

Key personnel overseeing the investment management of the fund are William Paolino, bureau chief; Candace Cox, director-investment strategy; and Patrick Kiernan, deputy director of fiscal.

New York Life Insurance Co.

	($ millions)
Total assets*	1,972
Defined benefit	1,678
Total defined contribution	294
Employer DB contributions	14
Benefit payments	61
Employer DC contributions	7

**P&I estimate*

Internally managed assets	
Total DB	970
Total DC	294
Defined benefit asset mix	
Stocks	24.7%
Fixed income	73.5%
Real estate equity	1.8%
Defined contribution asset mix	
Other stock	14.2%
Fixed income	69.5%
GICs/BICs	11.1%
Cash equivalents	5%
Other	0.2%

NEW YORK — As of Sept. 30, *Pensions & Investments* estimates New York Life Insurance Co.'s total employee benefit assets increased 17.8% from a year earlier. Defined benefit assets increased an estimated 16.3% during the same period; defined contribution assets increased an estimated 27.3%.

Equity managers: Domestic — MacKay-Shields and Monitor Capital.

International — Gamma Advisors and MacKay-Shields.

Fixed-income managers: MacKay-Shields and Monitor Capital.

Top 200 funds with assets in private placements

Defined benefit

Fund	($ millions)
Wisconsin State	2,596
AT&T	1,817
General Electric	1,584
Alabama Retirement	1,017
New York State Teachers	520
State of Michigan	464
Colorado Employees	305
GTE	248
Prudential Insurance	200
North Carolina	198
Boilermakers-Blacksmiths	176
Episcopal Church	153
Arkansas Teachers	126
Honeywell	116
USX	100
New Jersey	90
Pacific Gas & Electric	90
Missouri Public Schools	88
Pennsylvania Public Schools	77
Union Carbide	77
Atlantic Richfield	62
Ford Motor	50
Maine State	47
San Francisco City & County	47
Travelers	46
Los Angeles County	40
Unisys	40
General Dynamics	38
Kentucky Retirement	33
International Paper	31
S. New England Telephone	29
Tenneco	29
Anheuser-Busch	28
Minnesota Mining & Mfg.	27
Du Pont	20
Los Angeles Water & Power	19
Xerox	19
Virginia	17
American Airlines	12
Georgia-Pacific	10
Eli Lilly	8
Phillips Petroleum	5
Missouri State	3
Pennsylvania State	3
Commonwealth Edison	1
Total	**10,706**

Defined contribution

Fund	($ millions)
TIAA-CREF	12,130
Xerox	3
Total	**12,133**

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Real estate managers: Greystone.

Key personnel overseeing the investment management of the fund are Lester L. Schoenberg, Paul T. Smith and George J. Trapp, all senior vice presidents.

New York State and Local Retirement Systems

	($ millions)
Total assets	50,081
Defined benefit	50,081
Employer DB contributions	0
Benefit payments	1,834
Internally managed assets	38,271
Defined benefit asset mix	
Stocks	50.4%
Fixed income	37.8%
Cash equivalents	2.2%
Real estate equity	2.2%
Mortgages	5.2%
Business investments	2.2%

ALBANY, N.Y. — As of Sept. 30, the New York State and Local Retirement Systems' total employee benefit assets increased 14.5% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Capital Guardian; Chicago Corp.; Delaware; First Wisconsin; GEO; Lazard; Lord Abbett; Miller Anderson Sherrerd; Montgomery Asset; Oppenheimer; Pilgrim Baxter; Provident Investment; Seligman; Shearson; Sit; and Wells Fargo Nikko.

International — Alliance; Brinson; Capital Guardian; and Schroder.

Real estate managers: CIGNA; Copley; CPI; ERIM/Select; Goldman Sachs; JMB; LaSalle; O'Connor; RREEF; Schroder; and TCW.

Limited partnerships: Adler & Shaykin; Advent; APA; Bridge Capital; Corporate Ventures; Crossroads Capital; Equitable; Forstmann Little; FS Equity; Gray Klein; Health Care Ventures; Hellman & Friedman; JLL; Kelso; KKR; Montgomery Bridge; NYS Business Venture; Peregrine Ventures; US Venture Partners; and Warburg Pincus.

The master and global custodian is Chase; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Edward V. Regan, state comptroller, and John E. Hull, deputy comptroller-investment.

New York State Teachers' Retirement System

	($ millions)
Total assets	32,514
Defined benefit	32,514
Employer DB contributions	466
Benefit payments	998
Internally managed assets	
Total DB	29,619
Defined benefit asset mix	
Stocks	58.2%
Fixed income	30.9%
Cash equivalents	2.1%
Real estate equity	2.6%
Mortgages	5.9%
Other	0.3%

ALBANY, N.Y.— As of Sept. 30, the New York State Teachers' Retirement System's total employee benefit assets increased 21.8% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Sanford C. Bernstein; Cowen; Lehman Ark; Morgan Grenfell; Peregrine Capital; and RCM Capital.

International — Bankers Trust; Baring International; Brinson; Schroder.

Fixed-income managers: — Sanford C. Bernstein.

Real estate managers: Equitable; Jones Lang Wootton; LaSalle; Lehndorff & Babson; and J.W. O'Connor.

The master custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are Harold N. Langlitz, executive director; Edward J. Reno Jr., securities investment officer; and George M. Philip, chief real estate investment officer.

North Carolina Retirement System

	($ millions)
Total assets	22,261
Defined benefit	21,689
Total defined contribution	572
401(k)	362
457	210
Employer DB contribution	635
Benefit payments	744
Employer DC contributions	34
Internally managed assets	
Total DB	14,051
Hedging devices used	
Stock options	
Defined benefit asset mix	
Stocks	31.8%
Fixed income	65.9%
Cash equivalents	1.3%
Real estate equity	0.9%
Venture capital	0.1%
Defined contribution asset mix	
Stock	44%
GICs/BICs	40%
Cash equivalents	16%

RALEIGH, N.C. — As of Sept. 30, the North Carolina Retirement System's total employee benefit assets increased 28.8% from a year earlier. Defined benefit assets increased 25.4% during the same period. The defined contribution plans are newly listed here.

Equity managers: Domestic — Alliance; Branch Bank; Central Carolina Bank; First Citizens Bank; First Union National; Franklin Street; NCNB; Wachovia; Wellington.

International -- Alliance; Wellington.

Real estate managers: Aetna; CIGNA; Goldman Sachs; J.P. Morgan; NCNB; Sentinel; Wachovia.

Other managers: Carolinas Capital; John Hancock; InterSouth Partners; Kitty Hawk; Massey Burch; N.C. Enterprises; Sprout; Venture First.

The master custodian is The Bank of New York.

Key personnel overseeing the investment management of the fund are Harlan E. Boyles, state treasurer; C. Douglas Chappell, deputy treasurer and director, investment and banking division; and P. Keith Leonard, deputy director, investment and banking division.

Northrop Corp.

	($ millions)
Total assets	4,169
Defined benefit	3,246
Total defined contribution	923
Thrift/savings	744
ESOP	179
Employer DB contributions	1
Benefit payments	82
Employer DC contributions	44
Defined benefit asset mix	
Stocks	73%
Fixed income	27%
Defined contribution asset mix	
Company stock	20%
Other stock	42.5%
Fixed income	11.9%
Cash equivalents	25.6%

LOS ANGELES -- As of Sept. 30, Northrop Corp.'s total employee benefit assets increased 26.2% from a year earlier. Defined benefit assets increased 26.5% during the same period; defined contribution assets increased 25.1%.

Equity managers: Domestic — Capital Guardian; Forstmann-Leff; Jennison; Putnam; RCM; State Street; and U.S. Trust, California.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts and Jennison.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are John Rettberg, vice president and treasurer; Rose Mary Abelson, director-trust administration and investment; and Linda Nakaki, manager-pension accounting.

NYNEX Corp.

	($ millions)
Total assets	16,740
Defined benefit	13,758
Total defined contribution	2,982
401(k)/thrift/savings	2,952
LESOP	30
Employer DB contributions	0
Internally managed assets	
Total DB	1,894
Defined benefit asset mix	
Stocks	56.7%
Fixed income	32.3%
Cash equivalents	0.8%
Real estate equity	8.6%

Top 200 funds with assets in LBOs*

Fund	($ millions)
Washington State Board	1,604
New York State & Local	927
TIAA-CREF	827
Oregon Employes	769
Wisconsin State	638
State of Michigan	622
Iowa Employees	531
AT&T	376
GTE	194
United Technologies	189
Illinois State	154
Utah State	100
Colorado Employees	94
ITT	87
Minnesota Mining & Mfg.	82
Delta Air Lines	80
Du Pont	80
Georgia-Pacific	63
World Bank	58
Aluminum Co. of America	33
Phillips Petroleum	29
Unisys	28
Pennsylvania State	24
Montana Board	22
Virginia	21
Hewlett Packard	20
Grumman	19
BankAmerica	17
American Airlines	9
Eli Lilly	2
Total	**7,699**

*All assets are defined benefit except for TIAA-CREF's figure, which is all defined contribution assets, and Hewlett Packard's figure, which includes $15 million in defined contribution assets.

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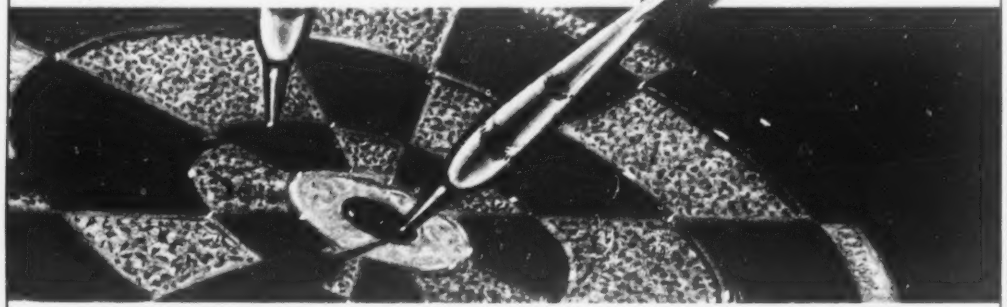

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Some Plain Talk About Defined Contribution Plans

RESPONSIBILITY

Selecting a provider for your company's 401(k) plan is a complex undertaking with far-reaching and long-lasting consequences. You bear a great responsibility to choose well. So when you select a company, or review your present providers, you will want to focus on the factors that really matter–the fundamental issues.

Employees Your first responsibility is to your company's employees because it's their financial security which is at stake. Since participants make their own investment decisions, you must ensure that all–the experienced and the novice alike–are provided with adequate education about the fundamentals of long-term investing. Employees should also be given convenient and timely access to information and the ability to change their investment line-up easily and quickly when necessary.

Your responsibility doesn't end when employees' initial selections have been made. Adequate information must also be provided as they transition through an employment career and on into retirement. The company you select should always be there for them.

Performance Of course, you want good performance. But in addition, your larger responsibility is to provide a broad, well-defined selection of investment options which provide dependable results over the long term. Your investment options–from conservative to aggressive–should be managed for specific objectives with each following a tightly prescribed and understandable investment strategy.

Partnership You strive for excellence in your own company. You should expect no less a commitment from a partner. Your administrative partner should have a deep line-up of well-trained people who will be ready to serve your needs, not only in the basics of timeliness and accuracy, but in responding to special requests. Your company is continually changing. Your partner should be flexible enough to grow and change with you.

Value You are willing to pay for quality, which does not mean excessive fees, but fair remuneration for value received. There should be no hidden assessments, no charges later on when you discover that your contract fees cover only minimum service levels. You should require full disclosure. And the same recognition of value should be present in the costs incurred by your participants for investment management and fund administration.

THE Vanguard GROUP
OF INVESTMENT COMPANIES

Directed investments	1.6%
Defined contribution asset mix:	
Company stock	32.2%
Other stock	23.6%
Fixed income	8.8%
GICs/BICs	33.3%
Loans	2.1%

NEW YORK — As of Sept. 30, NYNEX Corp.'s total employee benefit assets increased 16.4% from a year earlier. Defined benefit assets increased 15.7% during the same period; defined contribution assets increased 19.4%.

Equity managers: Domestic — American National; Barrow Hanley Mewhinney & Strauss; Daniel Breen; DFA; Fidelity Management; Franklin; Investment Research; McCowan; Mitchell Hutchins; TCW; Trinity; and Wells Fargo Nikko.

International — American National; Capital Guardian; DFA; Morgan Stanley; Pictet International; State Street Bank; and Wells Fargo Nikko.

Fixed-income managers: Domestic — Boston Co.; Brown Brothers Harriman; Global Fixed Income; John Hancock; Jennison; Lincoln Capital; Mellon Bond; Miller, Anderson & Sherrerd; Mitchell Hutchins; Standish Ayer & Wood; State Street Research; and Western Asset.

International — Global Fixed Income and WorldInvest.

Real estate managers: AEW; CPI; Heitman; Mellon-McMahan; and TREET.

The master trustee and global custodian is Mellon Bank.

Key personnel overseeing the investment management of the fund are Jeffrey Rubin, vice president-finance and treasurer; William Heitmann, corporate director-finance; and Joseph Clines, director-investment management.

O

The Police and Firemen's Disability and Pension Fund of Ohio

	($ millions)
Total assets	3,717
Defined benefit	3,717
Employer DB contributions	171
Benefit payments	281
Internally managed assets	2,244
Defined benefit asset mix:	
Stocks	33%
Fixed income	53.8%
Cash equivalents	6.5%
Real estate equity	6%
Mortgages	0.3%
Venture capital	0.4%

COLUMBUS, Ohio — As of Sept. 30, The Police and Firemen's Disability and Pension Fund of Ohio's total employee benefit assets increased 19.9% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; Axe Core; Bankers Trust; Duff & Phelps; Loomis, Sayles; Oppenheimer; Society Bank; Value Line.

Real estate managers: Copley; MIG; Schroder; Sentinel; T.A. Associates.

Other managers: Cardinal Financial; Chemicals and Materials Enterprise; Primus Venture.

The master trustee is the state treasurer; the real estate investment consultant is The Townsend Group.

Key personnel overseeing the investment management of the fund are Theodore G. Hall, assistant director-investments; Christopher J. Woods, fixed-income portfolio manager; and Lourdes S. Canlas, real estate manager.

Ohio Public Employees Retirement System

	($ millions)
Total assets	24,272
Defined benefit	24,272
Employer DB contributions	858
Benefit payments	984
Internally managed assets	23,267
Defined benefit asset mix:	
Stocks	20.5%
Fixed income	60.2%
Cash equivalents	15.2%
Real estate equity	4.1%

COLUMBUS, Ohio — As of Sept. 30, the Ohio Public Employees Retirement System's employee benefit assets — all defined benefit — increased 17.9%.

Real estate managers: AFL-CIO; Bristol Group; Lowe Enterprises; NCNB; Rothschild; Sentinel.

The master trustee is the state treasurer.

The key person overseeing the investment management of the fund is Robert A. McLaughlin, investment officer.

School Employees Retirement System of Ohio

	($ millions)
Total assets	3,371
Defined benefit	3,371
Employer DB contributions	199
Benefit payments	290
Internally managed assets	1,896
Defined benefit asset mix:	
Stocks	43%
Fixed income	22.9%
Cash equivalents	2.8%
Real estate equity	9.4%
Mortgages	0.8%
Mortgage-backed securities	20.4%
Venture capital	0.7%

COLUMBUS, Ohio — As of Sept. 30, the School Employees Retirement System of Ohio's total employee benefit assets increased 19.4% from a year earlier. All assets are defined benefit.

Equity manager: Domestic — Mellon Capital.

Real estate managers: Equitable; Lehndorff & Babson; J.P. Morgan; NCNB; Prudential.

Venture capital managers: Cardinal Capital; Morgenthaler Venture; Primus Venture.

The master custodian is Ameritrust; the investment consultants are Ronald A. Karp and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are Paul M. Kubinsky, director of investments; Robert G. Cowman, assistant director of investments; and Thomas R. Anderson, executive director.

The State Teachers Retirement System of Ohio

	($ millions)
Total assets	20,200
Defined benefit	20,200
Employer DB contributions	793
Benefit payments	1,100
Internally managed assets	20,200
Defined benefit asset mix:	
Stocks	34.5%
Fixed income	45.8%
Cash equivalents	4.2%
Real estate equity	9.3%
Mortgages	6%
Venture capital	0.2%

COLUMBUS, Ohio — As of Sept. 30, the State Teachers Retirement System of Ohio's total employee benefit assets increased 11% from a year earlier. All assets are defined benefit.

The master custodians are the state treasurer and Bank One Trust; the investment consultants are Wellington Management and Frank Russell.

Key personnel overseeing the investment management of the fund are C. James Grothaus, executive director; Stephen A. Mitchell, deputy executive director-investments; and Daniel M. Szente, assistant director-investments.

Oklahoma Public Employees' Retirement System

	($ millions)
Total assets*	1,961
Defined benefit	1,961

*P&I estimate

November 1991

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DeBartolo

has sold its interest in

Alderwood Mall

a 962,037 square foot regional mall located in

Lynnwood, Washington
to an institutional investor

The undersigned arranged this transaction in its capacity
as exclusive financial advisor to Alderwood Mall Associates.

Chemical Real Estate Finance Group

CHEMICAL

OKLAHOMA CITY — As of Sept. 30, *Pensions & Investments* estimates the Oklahoma Public Employees' Retirement System's total employee benefit assets increased 48.8% from the $1.318 billion the Money Market Directory reported for the system as of May 1990. All assets are defined benefit.

Key personnel overseeing the investment management of the fund are Rex Privett, executive director, and Harold B. Sinclair, deputy director.

Teachers' Retirement System of Oklahoma

	($ millions)
Total assets	2,348
Defined benefit	2,200
Total defined contribution	148

Internally managed assets	
Total DB	190
Defined benefit asset mix	
Stocks	56.4%
Fixed income	31.3%
Cash equivalents	7.9%
GICs/BICs	4.4%

OKLAHOMA CITY — As of Sept. 30, the Teachers' Retirement System of Oklahoma's total employee benefit assets increased 12% from a year earlier. Defined benefit assets increased 12.4% in the same period; defined contribution assets — in a 403(b) plan — increased 5.7%.

Equity managers: Domestic — Chicago Corp.; Eagle Asset; Hotchkis & Wiley; Tom Johnson; Mitchell Hutchins.

Fixed-income managers: Domestic — Investment Advisors; Liberty National Bank; Mellon Bond; Neuberger & Berman.

The master custodian is Bankers Trust; the investment consultant is Mercer.

Key personnel overseeing the investment management of the fund are Randall L. Kopsa, secretary-treasurer; Jo Witt, financial operations manager; and Steve Hull, chairman-board of trustees.

Central Pension Fund of the International Union of Operating Engineers and Participating Employers

	($ millions)
Total assets	2,570
Defined benefit	2,570
Employer DB contributions	127
Benefit payments	103

Hedging devices used	
Bond options	
Fixed-income futures	
Defined benefit asset mix	
Stocks	30.8%
Fixed income	40.7%
Cash equivalents	15.2%
Real estate equity	5.5%
GICs/BICs	2.3%
Mortgages	5.5%

WASHINGTON — As of Sept. 30, the Central Pension Fund of the International Union of Operating Engineers and Participating Employers' total employee benefit assets increased 21.6% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Sanford Bernstein; Concord Capital; GAMCO; Husic; Shearson; Southeastern; and Wells Fargo Nikko.

Fixed-income managers: Domestic — Duff & Phelps; Loomis Sayles; STW; Western Asset; and Wells Fargo Nikko.

Real estate managers: AFL-CIO; AEW; and ULLICO.

The master trustee is State Street Bank; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Jack E. Johnson, director of finance, and Robert A. Birch, assistant director of finance.

Oregon Public Employes Retirement System

	($ millions)
Total assets*	12,536
Defined benefit	12,536
Employer DB contributions	412
Benefit payments	410

as of June 30, 1991

Internally managed assets	3,820
Hedging devices used	
Stock options	
Stock index futures	
Short selling	
Defined benefit asset mix	
Stocks	60.5%
Fixed income	21.5%
Real estate equity	5.5%
Mortgages	5.4%
Other	7.1%

SALEM, Ore. — As of June 30, the Oregon Public Employes Retirement System's total employee benefit assets increased 26.6% from Sept. 30, 1990. All assets are defined benefit.

Equity managers: Domestic — Batterymarch; BEA; Columbia Management; Cutler; Franklin Asset; Froley, Revy; General American; Harris; Hotchkis & Wiley; Pinnacle; Quest Advisory; RCM; Sarofim; Thompson/Rubenstein; and Wentworth Hauser.

International — Clay-Finlay; Cursitor-Eaton; Daiwa; Matuschka; Nomura; Philippe; and Rowe Price-Fleming.

Real estate manager: Alex. Brown.

LBO manager: KKR.

The master custodian is First Interstate of Oregon; the global custodian is Morgan Stanley; the investment consultants are Frank Russell and Wilshire.

Key personnel overseeing the investment management of the fund are James C. George, investment manager, and John B. Fewel Jr., equity investment officer.

Owens-Illinois Inc.

	($ millions)
Total assets	2,650
Defined benefit	2,305
401(k)	345
Employer DB contributions	4
Benefit payments	159
Employer DC contributions	5

Internally managed assets	
Total DB	135
Total DC	36
Hedging devices used	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	73%
Fixed income	14%
Cash equivalents	5%
Real estate equity	5%
Mortgages	3%
Defined contribution asset mix	
Other stock	26%
Fixed income	3%
GICs/BICs	59%
Cash equivalents	9%
Loan fund	3%

TOLEDO, Ohio — As of Sept. 30, Owens-Illinois Inc.'s total employee benefit assets increased 14% from a year earlier. Defined benefit assets increased 14% during the same period; defined contribution assets increased 13.1%.

The master trustees are Bankers Trust for the defined benefit plan and State Street Bank for the defined contribution plan.

Key personnel overseeing the investment management of the fund are Ronald C. Boller, director-benefit and risk finance; Constance L. Souders, manager-employee benefit plan assets; and Lee A. Wesselmann, senior vice president-finance and chief financial officer.

P

Pacific Gas & Electric Co.

	($ millions)
Total assets	5,600
Defined benefit	3,532
401(k)	2,068
Employer DB contributions	91
Benefit payments	130
Employer DC contributions	32

Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
U.S. stocks	59%
Non-U.S. stocks	13%
Fixed income	19%
Cash equivalents	1%
Real estate equity	8%
Defined contribution asset mix	
Company stock	90%
Other stock	7%
Fixed income	1%
GICs/BICs	2%

SAN FRANCISCO — As of Sept. 30, Pacific Gas & Electric Co.'s total employee benefit assets increased 34.2% from a year earlier. Defined benefit assets increased 26.3% during the same period; defined contribution assets increased 50.4%.

Equity managers: Domestic — Bankers Trust; Barrow Hanley Mewhinney & Strauss; Beal; Dodge & Cox; Geewax Terker; Jundt; Metropolitan Life; Miller, Anderson & Sherrerd; NCM; RCM Capital; Sturdivant; Valenzuela; and Wells Fargo Nikko.

International — Arnhold & S. Bleichroeder; Bankers Trust; Capital Guardian; Oechsle; and Wells Fargo Nikko.

Fixed-income managers: Domestic — Sanford Bernstein; Fischer Francis Trees & Watts; and Miller Anderson & Sherrerd.

Real estate managers: CPI; JMB; LaSalle; Prudential; RREEF; and TCW.

Private placement manager: Prudential.

The master trustee and global custodian is State Street Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Sunny Oberoi, director-investments and benefit finance; and Jim Failor, senior financial analyst.

Pacific Telesis Group

	($ millions)
Total assets	12,594
Defined benefit	10,646
Total defined contribution	1,948
401(k)	1,849
LESOP	99
Employer DB contributions	0
Benefit payments	423
Employer DC contributions	30

Internally managed assets	
Total DB	272
Total DC	1,697
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	65.8%
Fixed income	23.7%
Cash equivalents	1.4%
Real estate equity	8.1%
Venture capital	1%
Defined contribution asset mix	
Company stock	44.4%
Other stock	23.4%
Fixed income	6.7%
GICs/BICs	25.5%

SAN FRANCISCO — As of Sept. 30, Pacific Telesis Group's total employee benefit assets increased 15.6% from a year earlier. Defined benefit assets increased 16.7% during the same period; defined contribution assets increased 9.9%.

Equity managers: Domestic — Delphi; Dodge & Cox; IDS; Jundt; Mellon; Morgan Grenfell; RCM; Sit; United Capital; Wellington; and Westridge.

International — Acadian; Capital Guardian; DFA; HD International; Morgan Grenfell; Nomura; Oechsle; Rowe Price-Fleming; Walter Scott; Sit/Kim; State Street; Wells Fargo; and Yamaichi.

Fixed-income managers: Domestic — Dodge & Cox; Fischer Francis; Hoisington; W.R. Huff; PIMCO; Standish Ayer; TCW; and Weiss Peck.

Real estate managers: Copley; JMB; La Salle; TCW; and Yarmouth.

Venture capital manager: Warburg Pincus.

The master trustee is Northern Trust; the global custodian is Bank of America; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are

Top 200 funds with assets in GICs/BICs

($ millions)

Fund	Total	Defined benefit	Defined contribution
AT&T	3,200	0	3,200
Boeing	3,108	0	3,108
Pacific Telesis	2,577	2,092	485
Westinghouse Electric	2,299	0	2,299
General Dynamics	1,814	189	1,625
Prudential Insurance	1,771	218	1,553
Southern Baptist Convention	1,427	74	1,353
ICMA Retirement	1,421	0	1,421
New York City	1,400	1,400	0
General Electric	1,262	264	998
Unisys	1,250	170	1,080
Philip Morris	1,175	0	1,175
Metropolitan Life	1,008	0	1,008
Ford Motor	1,000	0	1,000
GTE	969	0	969
Xerox	926	181	745
NYNEX	911	0	911
Mobil Oil	895	0	895
Procter & Gamble	884	0	884
J.C. Penney	866	0	866
Aetna Life	810	0	810
Halliburton	774	0	774
Raytheon	771	0	771
Bell Atlantic	767	0	767
Monsanto	690	0	690
CIGNA	689	0	689
Travelers	669	603	66
Delta Air Lines	587	0	587
United Parcel Service	566	97	469
Grumman	561	0	561
ITT	555	0	555
Aluminum Co. of America	530	0	530
Colorado Employees	495	495	0
Cooper Industries	485	0	485
Union Carbide	483	0	483
Minnesota Mining & Mfg.	469	0	469
Kaiser Permanente	466	0	466
PPG Industries	466	0	466
Southwestern Bell	464	0	464
Eli Lilly	461	36	425
K mart	453	0	453
Johnson & Johnson	450	0	450
TRW	434	0	434
Georgia-Pacific	423	0	423
Phillips Petroleum	408	0	408
Chrysler	391	0	391
Inland Steel	355	0	355
American Electric Power	341	0	341
U S WEST	326	0	326
Martin Marietta	304	0	304
Honeywell	300	2	298
Trans World Airlines	296	37	259
Hospital/Healthcare	295	295	0
Deere	280	0	280
S. California UFCW	253	253	0
American Airlines	250	0	250
Caterpillar	243	0	243
United Methodists	241	108	133
FPL Group	220	0	220
S. New England Telephone	204	0	204
Owens-Illinois	203	0	203
GenCorp	199	0	199
Tennessee Valley Authority	196	20	176
Abbott Labs	162	0	162
Nat'l Electrical Contractor	161	128	33
USX	160	0	160
North Carolina	145	0	145
BankAmerica	122	0	122
Presbyterian Church	105	105	0
Oklahoma Teachers	96	96	0
Western Teamsters	72	72	0
University of California	69	0	69
Minnesota State	66	0	66
Nat'l Rural Electric Co-op	65	0	65
Navistar	61	32	29
International Paper	60	60	0
Operating Engineers	59	59	0
S. California Edison	54	0	54
Pacific Gas & Electric	45	0	45
Anheuser-Busch	41	0	41
New Mexico Employees	40	0	40
New York Life	34	0	34
Missouri Public Schools	29	29	0
Atlantic Richfield	21	21	0
Hawaii	19	19	0
Boilermakers-Blacksmiths	13	13	0
Missouri State	12	12	0
UMWA	8	0	8
Bechtel Power	7	0	7
Illinois Universities	3	3	0
Honeywell	2	2	0
Total	**50,717**	**7,185**	**43,532**

E.D. Taylor, executive director-investment management, and R.P. McGahan, director-pension fund.

J.C. Penney Co. Inc.

	($ millions)
Total assets	4,056
Defined benefit	1,468
Total defined contribution	2,588
Profit-sharing	997
Thrift/savings	1,591
Employer DB contributions	0
Benefit payments	36
Employer DC contributions	0
Defined benefit asset mix	
Stocks	68.6%
Fixed income	22.6%
Cash equivalents	2.3%
Real estate equity	6.5%
Defined contribution asset mix	
Company stock	67%
GICs/BICs	33%

DALLAS — As of Sept. 30, J.C. Penney Co.'s total employee benefit assets increased 36.8% from a year earlier. Defined benefit assets increased 20.1% during the same period; defined contribution assets increased 48.6%.

Equity managers: Domestic — Batterymarch; GeoCapital; Lieber; Miller Anderson; RCM.

International — Grantham, Mayo and H.D. International.

Real estate managers: RREEF and TCW.

The master trustee and global custodian is State Street Bank; the investment consultant is Russell.

Key personnel overseeing the investment management of the fund are Philip Halpern, managing director-benefit investments, and Mary Jane Akerman, portfolio manager.

Pennsylvania Public School Employes' Retirement System

	($ millions)
Total assets	19,300
Defined benefit	19,300
Internally managed assets	
Total DB	3,000
Defined benefit asset mix	
Stocks	45.1%
Fixed income	49.7%
Cash equivalents	0.3%
Real estate equity	2.8%
Mortgages	1.3%
Other	0.8%

HARRISBURG, Pa. — As of Sept. 30, the Pennsylvania Public School Employes' Retirement System's total employee benefit assets increased 11.8% from Aug. 31 of the previous year. All assets are defined benefit.

The master custodian is PNC; the global custodian is State Street Bank; the investment management consultant is Evaluation Associates.

The key person overseeing the investment management of the fund is John C. Lane, chief investment officer.

Pennsylvania State Employes' Retirement System

	($ millions)
Total assets*	11,131
Defined benefit	11,131
Employer DB contributions	419
Benefit payments	600

*as of Aug. 31, 1991

Defined benefit asset mix	
Stocks	48%
Fixed income	28%
Cash equivalents	8%
Real estate equity	8%
Mortgages	7%
Venture capital	1%

HARRISBURG, Pa. — As of Aug. 31, the Pennsylvania State Employes' Retirement System's total employee benefit assets increased 17.4% from a year earlier. All of the assets are definod benefit.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Geewax, Terker; McGlinn; Mellon Capital; Mellcn Equity; Miller, Anderson & Sherrerd; Pilgrim, Baxter, Greig; Provident Investment; SunBank Capital; Trinity; Wells Fargo Nikko.

International — Miller, Anderson & Sherrerd; Morgan Grenfell; Scudder, Stevens & Clark.

Fixed-income managers: Domestic — Delaware; W.R. Huff; Latimer & Buck Financial; Mellon Bond; TCW.

International — Miller, Anderson & Sherrerd.

Real estate managers: Aetna; Alex. Brown Kleinwort Benson; Copley; Corporate Property Investors; John Hancock; Heitman; JMB; Metric; Prudential; PSI; Sentinel.

Tactical asset allocation manager: Wells Fargo Nikko.

Private placement manager: CIGNA.

Alternative investments managers: Brentwood; Code, Hennessy & Simmons; Maverick; Murphy & Fauver; MMG Patricof; RR&Z Capital; Schroder Venture.

Venture capital managers: APA/Fostin; CEO; Fostin Capital; Genesis Seed Fund; Grotech; Keystone; NEPA; Pittsburgh Seed Fund; PNC; Point Venture; TDH; Zero State.

Cash manager: Payden & Rygel.

The master custodian is the Pennsylvania Treasury; the domestic subcustodian is CoreStates; the global subcustodian is State Street; the investment consultants are Wilshire, Ronald Karp and Pathway Capital.

Key personnel overseeing the investment management of the fund are Kenneth G. Mertz II, chief investment officer; and Karen N. Nicely, assistant chief investment officer.

Philip Morris Cos. Inc.

	($ millions)
Total assets	8,698
Defined benefit	5,339
Total defined contribution	3,359
Profit-sharing	1,972
Thrift/savings	1,387
Employer DB contributions	2
Benefit payments	233
Employer DC contributions	160
Hedging devices used	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	66%
Fixed income	28%
Cash equivalents	1%
Real estate equity	2%
Annuities	3%
Defined contribution asset mix	
Company stock	42%
Other stock	19%
Fixed income	1%
GICs/BICs	35%
Other	3%

NEW YORK — As of Sept. 30, Philip Morris Cos. Inc.'s total employee benefit assets increased 24.6% from a year earlier. Defined benefit assets increased 19.5% during the same period; defined contribution assets increased 33.6%.

Equity managers: Domestic — Alliance; Ardsley; Ariel; Bernstein; Eagle; Emerging Growth Partners; First Wisconsin; Glickenhaus; Neuberger & Berman; RCM Growth; Rosenberg; Wellington.

International — Morgan Grenfell; Nomura; Schroder; WorldInvest.

Fixed-income managers: Domestic — Fischer, Francis; Loomis, Sayles; PIMCO; Reams.

Real estate managers: Heitman; JMB; NewCourt; Schroder; TCW.

Other managers: Blackstone; Consumer Venture Partners; John Hancock; NewCourt; Sprout.

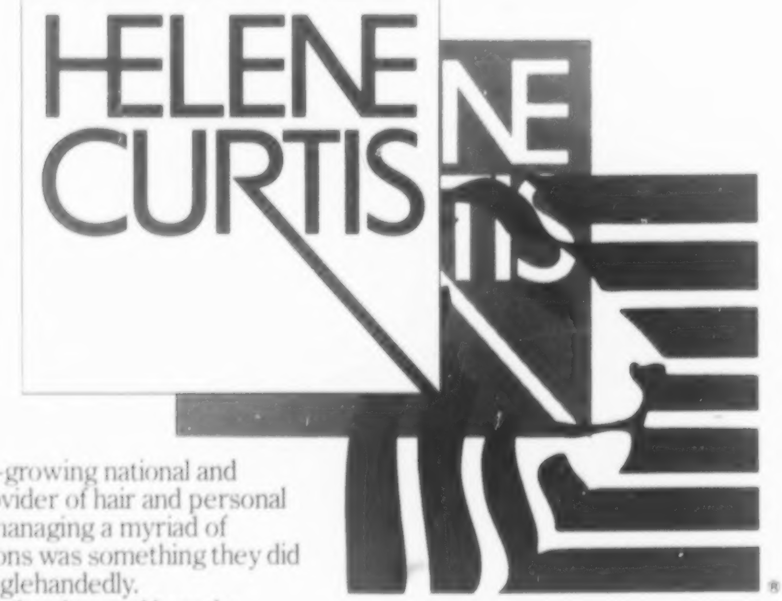
The master trustee and global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are David M. Kirby, vice president, and Mary Lee Calimano, director.

Phillips Petroleum Co.

	($ millions)
Total assets	2,661
Defined benefit	488
Total defined contribution	2,173
Thrift/savings	1,232
LESOP	941
Employer DB contributions	0
Benefit payments	10
Employer DC contributions	4
Hedging devices used	
Stock options	
Bond options	

Who did Helene Curtis turn to for styling their Master Trust?



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Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	29%
Fixed income	58%
Cash equivalents	1%
Real estate equity	6%
LBOs	6%
Defined contribution asset mix	
Company stock	59%
Fixed income	6%
GIC's/BIC's	33%
Cash equivalents	2%

BARTLESVILLE, Okla. — As of Sept. 30, Phillips Petroleum Co.'s total employee benefit assets increased 8.6% from a year earlier. Defined benefit assets increased 8.4% during the same period; defined contribution assets increased 8.7%.

Equity managers: Barrow Hanley; Travelers; Wells Fargo Nikko.

Fixed-income managers: — Equitable; J.P. Morgan; Palmieri; Prudential.

Real estate managers: Citibank; JMB.

Other manager: Forstmann Little.

The master trustee is Citibank.

R.W. Holsapple, manager-foreign exchange and investments, oversees investment management of the fund.

Plumbers National Headquarters

	($ millions)
Total assets*	1,881
Defined benefit	1,881

*P&I estimate

CHEVERLY, Md. — As of Sept. 30, Plumbers National Headquarter's total employee benefit assets increased an estimated 21.7% from a year earlier. All assets are defined benefit.

The key person overseeing the investment management of the fund is Robert Nicholson, chief administrator.

PPG Industries Inc.

	($ millions)
Total assets	2,362
Defined benefit	1,017
401(k)	1,345
Employer DB contributions	0
Benefit payments	83
Employer DC contributions	39
Hedging devices used	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	54%
Fixed income	46%
Defined contribution asset mix	
Company stock	61%
Other stock	3%
GICs/BICs	35%
Other	1%

PITTSBURGH — As of Sept. 30, PPG Industries Inc.'s total employee benefit assets increased 17.5% from a year earlier. Defined benefit assets increased 14% during the same period. Defined contribution assets increased 20.2%.

Equity managers: Domestic — Chancellor; Mellon Capital; Wells Fargo Nikko.

International — Morgan Stanley; Schroder.

Fixed-income managers: Domestic — Equitable; J.P. Morgan.

Cash manager: Neuberger & Berman.

The master trustee and global custodian is Mellon Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Charles H. Elmer, director-benefits investment and financing, and William R. Dewalt and Ellen G. Peterson, managers.

The Board of Pensions of the Presbyterian Church (USA)

	($ millions)
Total assets	2,700
Defined benefit	2,700
Employer DB contributions	56
Benefit payments	83
Defined benefit asset mix	
Stocks	55%
Fixed income	29%
Cash equivalents	4%
Real estate equity	8%
GICs/BICs	4%

PHILADELPHIA — As of Sept. 30, The Board of Pensions of the Presbyterian Church (USA)'s total employee benefit assets — all defined benefit assets — increased 17.4% from a year earlier.

Equity managers: Domestic — Barrow, Hanley; Capital Guardian; GeoCapital; Lazard Freres; J.P. Morgan; Morgan Grenfell; Trust Company Bank; Wells Fargo Nikko.

International — Capital Guardian; Marvin & Palmer; PCM; Templeton; Wells Fargo Nikko.

Fixed-income managers: CoreStates; Loomis, Sayles; NCM; PIMCO; Reams.

Real estate managers: CIGNA; Copley; Equitable; JMB; LaSalle; O'Connor; TCW.

The master trustee and global custodian is Mellon Bank.

The key person overseeing the investment management of the fund is Judith D. Freyer, vice president-investments and treasurer.

Procter & Gamble Co.

	($ millions)
Total assets*	7,105
Defined benefit	180
Total defined contribution	6,925
Profit-sharing	4,466
401(k)	59
ESOP	2,400
Employer DB contributions	0
Benefit payments	12
Employer DC contributions	177

*as of June 30, 1991

Internally managed assets	
Total DC	6,000
Hedging devices used	
Fixed-income futures	
Defined benefit asset mix	
Stocks	34%
Fixed income	59%
Cash equivalents	7%
Defined contribution asset mix	
Company stock	84%
Other stock	1%
Fixed income	1%
GICs/BICs	11%
Cash equivalents	3%

CINCINNATI — As of June 30, Procter & Gamble Co.'s total employee benefit assets increased 17.9% from a year earlier. Defined benefit assets increased 5.3% during the same period; defined contribution assets increased 18.2%.

Equity managers: Domestic — Ariel; Babson; Bankers Trust; Bernstein; Fidelity Investment; IDS Advisory; Investors Research; J.P. Morgan Investment; Northern Trust; Wells Fargo Nikko.

International — Wells Fargo Nikko.

Fixed-income managers: Domestic — Bankers Trust; IDS Advisory; Lowe Brockenbrough Tierney & Tattersall; Merrill Lynch; J.P. Morgan Investment; Northern Trust; T. Rowe Price; Wells Fargo Nikko.

Other managers: Aetna Capital; Central Trust; Hartford; Metropolitan Life; Prudential Asset.

Key personnel overseeing the investment management of the fund are G.M. Gibson, treasurer; J.R. Lawhead, assistant treasurer; and J.R. Smith, manager-pension plan coordination.

Prudential Insurance Co. of America

	($ millions)
Total assets	6,764
Defined benefit	4,949
Total defined contribution	1,815
401(k)	191
Thrift/savings	1,624
Employer DB contributions	0
Benefit payments	258
Employer DC contributions	0
Internally managed assets	
Total DB	4,926
Total DC	1,815
Hedging devices used	
Stock index futures	
Defined benefit asset mix	
Stocks	46.2%
Fixed income	32.4%
Cash equivalents	5.5%
Real estate equity	11.5%
GICs/BICs	4.4%
Defined contribution asset mix	
Other stock	11.3%
GICs/BICs	88.7%

NEWARK, N.J. — As of Sept. 30, Prudential Insurance Co.'s total employee benefit assets increased 15.5% from a year earlier. Defined benefit assets increased 15.2% during the same period; defined contribution assets increased 16.4%.

All assets are managed by Prudential affiliates except for $24 million managed by M.R. Beal & Co.

The consultant is Prudential Diversified Investment Strategies.

Key personnel overseeing the investment management of the fund are Paul C. Guidone, managing director and chief investment officer, and Mark Stumpp, research director.

R

Raytheon Co.

	($ millions)
Total assets	3,633
Defined benefit	2,510
Total defined contribution	1,123
401(k)	1,045
ESOP	78
Employer DB contributions	75
Benefit payments	90
Employer DC contributions	57
Defined benefit asset mix	
Stocks	72%
Fixed income	27%
Cash equivalents	1%
Defined contribution asset mix	
Company stock	7%
Other stock	19%
GICs/BICs	74%

LEXINGTON, Mass. — As of Sept. 30, Raytheon Co.'s total employee benefit assets increased 21.8% from a year earlier. Defined benefit assets increased 21.6% during the same period; defined contribution assets increased 22.3%.

Equity managers: Domestic — Ariel; Batterymarch; Dewey Square; INVESCO; Loomis, Sayles; Matrix; Paribas; Rosenberg; State Street Research; and Sun Bank.

Fixed-income managers: Domestic — Dewey Square; Loomis, Sayles; J.P. Morgan; and Richmond Capital.

The master trustee is Boston Safe.

Key personnel overseeing the investment management of the fund are Herbert Deitcher, senior vice president/treasurer; Steven S. DeMeo, senior benefits financing specialist.

Employees Retirement System of Rhode Island

	($ millions)
Total assets	2,788
Defined benefit	2,788
Employer DB contributions	0
Benefit payments	202
Internally managed assets	31
Hedging devices used	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	49%
Fixed income	33%
Cash equivalents	12%
Real estate equity	4%
Foreign stocks	2%

PROVIDENCE, R.I. — As of Sept. 30, the Employees Retirement System of Rhode Island's total employee benefit assets increased 20.1% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Boston Co.; Fleet/Norstar; Provident Investment.

International — Alliance.

Fixed-income managers: Domestic — Brown Brothers; Fidelity; Fleet/Norstar.

Real estate managers: Aetna; Heitman; Lehndorff & Babson; Phoenix.

The master custodian and global custodian is State Street Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are John Simmons, deputy general treasurer; Stephen Iafrate, fiscal manager/administrative officer; and George Creapeau, fiscal analyst.

RJR Nabisco Inc

	($ millions)
Total assets*	3,737
Defined benefit	2,589
Total defined contribution	1,148
Employer DB contributions	2

*P&I estimate

NEW YORK — As of Sept. 30, *Pensions & Investments* estimates RJR Nabisco Inc.'s total employee benefit assets increased 11.1% from a year earlier. Defined benefit assets increased an estimated 7.9%; defined contribution assets increased an estimated 19.1%.

Key personnel overseeing the investment management of the fund are John W. MacMurray, vice president-pension administration; Noreen E. Clarke, manager-pension administration; and David E. Marshall, vice president-compensation and benefits.

Rockwell International Corp.

	($ millions)
Total assets*	10,125
Defined benefit	7,125
Thrift/savings	3,000

*P&I estimate

PITTSBURGH — As of Sept. 30, *Pensions & Investments* estimates Rockwell International Corp.'s total employee benefit assets increased 4.2% from a year earlier.

Key personnel overseeing the investment management of the fund are Lee H. Cramer, vice president and treasurer, and J.J. Christin, senior pension investment officer.

S

San Francisco City and County Employees' Retirement System

	($ millions)
Total assets*	4,586
Defined benefit	4,586
Employer DB contributions	230
Benefit payments	199

*as of June 30, 1991

Internally managed assets	2,464

Top 200 funds with assets in real estate equity

Defined benefit

Fund	($ millions)
California Employees	5,073
AT&T	4,257
Ohio Teachers	2,056
General Electric	1,903
California State Teachers	1,703
Bell Atlantic	1,557
Illinois Teachers	1,315
State of Michigan	1,288
Connecticut Trust	1,275
NYNEX	1,188
Washington State Board	1,088
New York State & Local	1,085
Ohio Employees	1,005
Ford Motor	900
Pacific Telesis	859
Pennsylvania State	851
Florida State	847
New York State Teachers	825
Western Teamsters	772
United Nations	718
Wisconsin State	683
Oregon Employes	650
Virginia	631
Minnesota State	583
Iowa Employees	569
Pennsylvania Public Schools	540
Prudential Insurance	509
Southwestern Bell	501
Colorado Employees	494
Westinghouse Electric	459
Kansas Employees	451
Illinois Universities	435
Chevron	434
Los Angeles County	422
Illinois Municipal	417
Texas Teachers	400
Hawaii State	376
Unisys	372
United Technologies	362
Exxon	355
Nevada Employees	354
Nat'l Electrical Contractors	344
Illinois State	341
San Francisco City & County	331
Ohio School Employees	316
Utah State	300
Metropolitan Life	287
Pacific Gas & Electric	276
Monsanto	260
USX	250
Caterpillar	226
Mass. Teachers/Employees	226
Xerox	222
Boilermakers-Blacksmiths	221
Ohio Police & Fire	221
Maryland State	220
Alaska State	219
Kentucky Retirement	215
Presbyterian Church	215
North Carolina	199
World Bank	190
Atlantic Richfield	186
Idaho Employees	181
Hospital/Healthcare	174
Minnesota Mining & Mfg.	167
Honeywell	167
International Paper	155
Union Carbide	154
Los Angeles Fire & Police	152
UMWA	150
Inland Steel	148
Operating Engineers	142
Los Angeles City	140
ITT	132
Rhode Island Employees	120
United Airlines	120
Chrysler	119
Grumman	117
Owens-Illinois	114
GTE	108
Delta Air Lines	104
Philip Morris	104
S. California UFCW	101
Amoco	100
S. New England Telephone	100
Sears, Roebuck	99
J.C. Penney	95
FPL Group	91
CIGNA	90
Missouri State	88
Citibank	87
Aetna Life	84
Louisiana Employees	84
Du Pont	83
Deere	69
Aluminum Co. of America	64
Alabama Retirement	60
Maine State	60
S. California Edison	60
Eli Lilly	56
United Methodists	56
Travelers	55
Johnson & Johnson	53
Anheuser-Busch	46
Chicago Municipal	43
Georgia-Pacific	41
K mart	38
Kentucky Teachers	37
Phillips Petroleum	28
New York Life	27
GenCorp	26
American Airlines	25
Bakery & Confectionery	24
BankAmerica	20
Trans World Airlines	19
Southern Baptist Convention	10
New Mexico Employees	6
Hewlett Packard	5
Southern Co.	4
Arkansas Teachers	1
Total	**50,630**

Defined contribution

Fund	($ millions)
TIAA-CREF	5,370
Bechtel Power	79
American Stores	73
United Methodists	69
Trans World Airlines	54
Xerox	26
Halliburton	21
Hewlett Packard	15
Nat'l Electrical Contractors	13
Metropolitan Life	11
Evangelical Lutheran Church	6
Total	**5,737**

Defined benefit asset mix:	
Stocks	33%
Fixed income	55%
Cash equivalents	6%
Real estate equity	6%

SAN FRANCISCO — As of June 30, the San Francisco City and County Employees' Retirement System's total employee benefit assets increased 5.9% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Hanson; McCullough, Andrews & Cappiello; Nicholas-Applegate; and Rosenberg.

International — Capital Guardian and Oechsle.

Fixed-income managers: Domestic — MacKay-Shields; Scudder, Stevens; and TCW.

International — Brinson and Warburg.

Real estate managers: Coldwell Banker; JMB; Lehndorff & Babson; Metric; RREEF; and Schroder.

The master trustee and global custodian is Bankers Trust; the investment consultants are Callan, Townsend and Lewis, Bailey.

Key personnel overseeing the investment management of the fund is Kenneth L. Shaffer, chief investment officer.

Sears, Roebuck & Co.

	($ millions)
Total assets	8,665
Defined benefit	2,733
Total defined contribution	5,932
Internally managed assets:	
Total DB	2,383
Total DC	5,779
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	61%
Fixed income	26%
Cash equivalents	1%
Real estate equity	4%
Foreign stocks	4%
Venture capital	4%
Defined contribution asset mix:	
Company stock	44%
Other stock	23%
Fixed income	13%
Cash equivalents	19%
Foreign stocks	1%

CHICAGO — As of Sept. 30, Sears, Roebuck & Co.'s total employee benefit assets increased 20.6% from a year earlier. Defined benefit assets increased 9.2% during the same period; defined contribution assets increased 26.7%.

Equity managers: Domestic — Rosenberg; State Street Bank.

International — Acadian; Capital Guardian; HD; Oechsle; State Street Bank.

Real estate manager: AEW.

The master trustees and global custodians are Continental Bank and Northern Trust.

Key personnel overseeing the investment management of the fund, all with Sears Investment Management, are David V. Dootson, president; and David H. Williams, Michael F. Norton and James M. Smith, vice presidents.

Shell Oil Co.

	($ millions)
Total assets*	8,783
Defined benefit	3,856
Total defined contribution	4,927
Employer DB contributions	75
Employer DC contributions	170

**From Money Market Directory*

HOUSTON — As of June 30, Shell Oil Co. had $8.783 billion in total employee assets, according to the Money Market Directory. Of that, $3.856 billion was in defined benefit assets and $4.927 billion was in defined contribution assets.

South Carolina Retirement System

	($ millions)
Total assets	9,386
Defined benefit	9,386
Employer DB contributions	334
Benefit payments	440
Internally managed assets	9,386
Defined benefit asset mix:	
Fixed income	93%
Cash equivalents	7%

COLUMBIA, S.C. — As of Sept. 30, the South Carolina Retirement System's total employee benefit assets increased 21.5% from June 30, 1990. All assets are defined benefit.

The investment consultant is Jamison, Eaton, & Wood.

Key personnel overseeing the investment management of the fund are Grady L. Patterson Jr., state treasurer; Sandy Huey, deputy state treasurer; and Chuck Sanders, senior assistant state treasurer.

Annuity Board of the Southern Baptist Convention

	($ millions)
Total assets	3,149
Defined benefit	1,200
Total defined contribution	1,949
Other	1,949
Employer DB contributions	0
Benefit payments	39
Employer DC contributions	170
Internally managed assets:	
Total DB	26
Defined benefit asset mix:	
Stocks	53.2%
Fixed income	34.6%
Cash equivalents	1.1%
Real estate equity	1%
GICs/BICs	8.4%
Mortgages	1.7%
Defined contribution asset mix:	
Stock	20.5%
Fixed income	8.5%
GICs/BICs	69.4%
Cash equivalents	1.6%

DALLAS — As of Sept. 30, the Annuity Board of the Southern Baptist Convention's total employee benefit assets increased 17.5% from a year earlier. Defined benefit assets increased 55.8% during the same period; defined contribution assets increased 2%.

Equity managers: Domestic — Barrow, Hanley; Capital Guardian; Eagle; GAMCO; Ganucheau, Stupfel; Goldman Sachs; Independence; JMC; Munder; Northern Trust; Provident; and RCM.

International — PCM and Swiss Bank.

Fixed-income managers: Domestic — Sanford Bernstein; Fidelity Management; Loomis, Sayles; J.P. Morgan; Payden & Rygel; Putnam; STW; and Western Asset.

Short-term manager: Northern Trust.

GIC manager: Certus.

The master trustee and global custodian is Northern Trust; the investment consultants are SEI and TPF&C.

Key personnel overseeing the investment management of the fund are John R. Jones, senior vice president, and Nathan L. Hutson, investment specialist.

Southern California Edison

	($ millions)
Total assets*	2,820
Defined benefit	1,700
Total defined contribution	1,120
401(k)	820
ESOP	300
Employer DB contributions	40
Benefit payments	56
Employer DC contributions	16

**as of June 30, 1991*

Internally managed assets:	
Total DB	137
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	65%
Fixed income	25%
Cash equivalents	2%
Real estate equity	4%
Venture capital	4%
Defined contribution asset mix:	
Company stock	78%
Other stock	6%
Fixed income	1%
GICs/BICs	7%
Cash equivalents	3%
Other	5%

ROSEMEAD, Calif. — As of June 30, Southern California Edison's total employee benefit assets increased 22.6% from a year earlier. Defined benefit assets increased 13.3% during the same period; defined contribution assets increased 40%.

Equity managers: Domestic — DFA; Dodge & Cox; Hotchkis and Wiley; Jundt; Mellon; Pacific Financial; RCM; Rosenberg Institutional; and Sit.

International — Acadian; Batterymarch; TCW; Warburg.

Fixed-income managers: Domestic — NCM; PIMCO; RCM.

Real estate managers: Equitable; JMB; LaSalle; Pacific Mutual; TCW.

Options manager: MCQ.

Overwriting manager: Bankers Trust.

Cash manager: Payden & Rygel.

The master trustee and global custodian is Security Pacific; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is Rick Yamamoto, manager of investments.

Southern California UFCW & Food Employers Pension Trust

	($ millions)
Total assets	2,288
Defined benefit	2,288
Employer DB contributions	42
Benefit payments	128
Internally managed assets	8
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	38%
Fixed income	44%
Cash equivalents	2%
Real estate equity	4%
GICs/BICs	11%
Mortgages	1%

CYPRESS, Calif. — As of Sept. 30, The Southern California UFCW & Food Employers Pension Trust's total employee benefit assets — all defined benefit — increased 10.4% from a year earlier.

Equity managers: Domestic — Cramblit & Carney; Lazard Freres; Oppenheimer; Trust Co. of the West; Wells Fargo Nikko.

Fixed-income managers: Domestic — PIMCO; Patterson Capital; Putnam; Weiss, Peck & Greer.

Real estate managers: LaSalle; Lehndorff & Babson; McMorgan; Prudential; Smith Barney Birtcher; TCW Realty.

The master trustee is First Interstate Bank; the investment consultants are R.V. Kuhns and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are P. Colleen Thompson, administrator, and Joel F. Meltz, controller.

The Southern Co.

	($ millions)
Total assets	3,985
Defined benefit	2,747
Total defined contribution	1,238
401(k)	985
ESOP	253
Employer DB contribution	0
Benefit payments	71
Employer DC contributions	4
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	68%
Fixed income	21%
Cash equivalents	10%
Real estate equity	1%
Defined contribution asset mix:	
Company stock	82.2%
Other stock	9.9%
Fixed income	7.9%

ATLANTA — As of Sept. 30, The Southern Co.'s total employee benefit assets increased 19% from a year earlier. Defined benefit assets increased 14.5% during the same period; defined contribution assets increased 30.3%.

Equity managers: Domestic — AmSouth; ANB Chicago; Husic; INVESCO; Jundt; Lincoln Capital; Miller, Anderson & Sherrerd; Northern Capital; Pilgrim Baxter Greig; and Spears, Benzak, Salomon & Farrell.

International — Baring, BEA, J.P. Morgan; and Scudder, Stevens & Clark.

Fixed-income managers: Domestic — J.P. Morgan; Trusco; and Wachovia.

International — Baring and Putnam.

Real estate managers: AMB; Metric; TA Associates; and Zell/Merrill Lynch.

The master trustee and global custodian is Bankers Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are William M. Stephens, assistant treasurer; Julie Flukinger, senior trust analyst; and Michael Vanous, trust analyst.

Money manager profiles will appear in the May 18 issue.

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Southern New England Telephone Co.

	($ millions)
Total assets	2,003
Defined benefit	1,695
Total defined contribution	308
Thrift/savings	296
ESOP	12
Employer DB contributions	71
Employer DC contributions	21
Defined benefit asset mix	
Stocks	56%
Fixed income	33%
Cash equivalents	1%
Real estate equity	6%
Other	4%
Defined contribution asset mix	
Company stock	27%
Other stock	7%
GICs/BICs	66%

NEW HAVEN, Conn. — As of Sept. 30, Southern New England Telephone Co.'s total employee benefit assets increased 15.8% from a year earlier. Defined benefit assets increased 16.1% during the same period; defined contribution assets increased 14.5%.

Equity managers: Domestic — American National Bank; Analytic Investment; Barrow, Hanley, Mewhinney & Strauss; Connecticut National Bank; Moran Asset; Wellington Trust; and Wells Fargo Nikko.

International — Mercator; PCM International; and Wells Fargo Nikko.

Fixed-income managers: Domestic — Connecticut National Bank; Equitable Life; Putnam; STW; and Wells Fargo Nikko.

Real estate managers: CIGNA; JMB; LaSalle; Schroder; and Sentinel.

Other managers: Columbine Venture; First Reserve; Hellman & Friedman; Recovery Equity; RIMCO; and Triumph Capital.

The master trustees are Bankers Trust for the defined contribution plan and Boston Safe Deposit for the defined benefit plan; the global custodian is Morgan Stanley for the defined benefit plan.

The key person overseeing the investment management of the fund is Katherine R. Griswold, director-pension fund.

Southwestern Bell Corp.

	($ millions)
Total assets	9,093
Defined benefit	7,674
Total defined contribution	1,419
401(k)	370
Thrift/savings	935
ESOP	114
Employer DB contributions	0
Benefit payments	311
Employer DC contributions	78
Defined benefit asset mix	
Stocks	64%
Fixed income	28%
Cash equivalents	2%
Real estate equity	6%
Defined contribution asset mix	
Company stock	44%
Other stock	16%
Fixed income	3%
GICs/BICs	33%
Loan fund	4%

ST. LOUIS — As of Sept. 30, Southwestern Bell Corp.'s total employee benefit assets increased 9.5% from a year earlier. Defined benefit assets increased 8.4% during the same period; defined contribution assets increased 16.2%.

Equity managers: Domestic — Franklin Portfolio Associates; GeoCapital; Goldman Sachs; Jennison; NFJ Investment; Nicholas-Applegate; Pilgrim Baxter; Rosenberg; Sasco Capital; Southeastern Asset; Wells Fargo Nikko.

International — IDS; Morgan Stanley; Nomura; Schroder Capital.

Fixed-income managers: Domestic — Jennison; Mississippi Valley.

Real estate managers: Boston Co.; Heitman; Mellon/McMahan.

Other managers: Brinson Partners; Bigler/Crossroads.

The master trustees are NCNB Texas (defined benefit) and Bankers Trust (defined contribution); the global custodian is Chase Manhattan (defined benefit); the investment consultants are Buck Pension Fund Services (defined benefit) and Becker & Rooney (defined contribution).

The key person overseeing the investment management of the fund is Charles Weaver, director-pension funds.

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State Farm Insurance Co.

	($ millions)
Total assets	4,080
Defined benefit	3,064
Total defined contribution	1,016

BLOOMINGTON, Ill. — As of Sept. 30, State Farm Insurance Co.'s total employee benefit assets increased 25.9% from a year earlier. Defined benefit assets increased 22.7% during the same period; defined contribution assets increased 36.9%.

T

Teachers Insurance & Annuity Association - College Retirement Equities Fund

	($ millions)
Total assets	99,600
Total defined contribution	99,600
Other	99,600
Employer DC contributions	3,500
Internally managed assets	99,600
Defined contribution asset mix:	
Stock	40.6%
Fixed income	26.3%
Cash equivalents	4.7%
Real estate	7.5%
Mortgages	20.9%

NEW YORK — As of Sept. 30, the Teachers Insurance & Annuity Association — College Retirement Equities Fund's total employee benefit assets increased 19.9% from a year earlier. All assets are defined contribution.

For TIAA, the master trustees are Citibank and Morgan Guaranty; for CREF, the master trustees are Bankers Trust and Morgan Guaranty. The global custodians are Chase Manhattan and Bankers Trust.

Key personnel overseeing the investment management for TIAA are J. Daniel Lee Jr., executive vice president; David B. Bullett and John A. Somers, senior vice presidents. Key personnel overseeing the investment management for CREF are James S. Martin, executive vice president; C. Oscar Morong Jr. and Virgil H. Cumming, senior vice presidents.

Teamsters, Central States, Southeast and Southwest Areas Pension Fund

	($ millions)
Total assets	11,163
Defined benefit	11,163
Employer DB contributions	733
Benefit payments	1,020
Internally managed assets	73
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	40.2%
Fixed income	54.8%
Cash equivalents	5%

ROSEMONT, Ill — As of Sept. 30, the Teamsters, Central States, Southeast and Southwest Areas Pension Fund's total employee benefit assets increased 18.8% from a year earlier. All assets are defined benefit.

Key personnel overseeing the investment management of the fund are Robert M. Warner, director-financial services, and Mark F. Angerame, financial group manager.

Western Conference of Teamsters Pension Trust

	($ millions)
Total assets	10,825
Defined benefit	10,825
Employer DB contributions	580
Benefit payments	725
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	21.4%
Fixed income	56.3%
Cash equivalents	1%
Real estate equity	7.1%
GICs/BICs	0.7%
Annuities	11.9%
Mortgages	1.6%

SEATTLE — As of Sept. 30, the Western Conference of Teamsters Pension Trust's total employee benefit assets — all defined benefit — increased 16.5% from a year earlier.

Equity managers: Domestic — Mellon; Prudential.

Fixed-income managers: Domestic — PIMCO; Prudential.

Real estate managers: Aetna; AEW; Phoenix Mutual; Prudential.

Alan D. Biller is the investment consultant.

Key personnel overseeing the investment management of the fund are Owen Bennett and Joe Ballew, both co-chairman, and Bill Lubersky, chairman-investment committee.

Tenneco Inc.

	($ millions)
Total assets	3,314
Defined benefit	2,345
401(k)	969
Internally managed assets:	
Total DC	893
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	64%
Fixed income	33%
Cash equivalents	1%
Mortgages	2%
Defined contribution asset mix:	
Company stock	24%
Other stock	6%
Fixed income	2%
Cash equivalents	65%
Other	3%

HOUSTON — As of Sept. 30, Tenneco Inc.'s total employee benefit assets increased 17.4% from a year earlier. Defined benefit assets increased 21.8% during the same period; defined contribution assets increased 7.8%.

Equity managers: Domestic — Capstone; Hotchkis & Wiley; IDS; Morgan Stanley; Nicholas-Applegate; Fayez Sarofim; Texas Commerce Bank.

International — Deutsche Asset Management; Morgan Stanley.

Fixed-income managers: Domestic — Capstone; Fischer, Francis; J.P. Morgan; State Street Bank; State Street Research; STW.

Other manager: Bridge Capital.

The master trustee and global custodian is Bankers Trust; the investment consultant is Callan.

The key person overseeing the investment management of the fund is Richard A. Robinson, executive director-investments.

Tennessee Consolidated Retirement System

	($ millions)
Total assets	10,077
Defined benefit	9,968
Total defined contribution	109
Other	109
Employer DB contributions	285
Benefit payments	307
Employer DC contributions	0
Internally managed assets:	
Total DB	9,968
Defined benefit asset mix:	
Stocks	33.8%
Foreign stocks	3.5%
Fixed income	54.3%
Foreign bonds	2.9%
Cash equivalents	5.5%
Defined contribution asset mix:	
Other stock	40%
Fixed income	52%
Cash equivalents	8%

NASHVILLE, Tenn. — As of Sept. 30, the Tennessee Consolidated Retirement System's total employee benefit assets increased 23.7% from a year earlier. Defined benefit assets increased 22.3%; the defined contribution assets weren't reported in 1990.

The master custodian and global custodian is Chase Manhattan; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Chuck Webb, chief investment officer, and Marshall Cox, fixed-income portfolio manager.

Tennessee Valley Authority Retirement System

	($ millions)
Total assets	3,484
Defined benefit	2,590
Total defined contribution	893
401(k)	112
Thrift/savings	142
Other	639
Employer DB contributions	48
Benefit payments	149
Employer DC contributions	0
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	50%
Fixed income	50%
Defined contribution asset mix:	
Stock	50%
Fixed income	50%

KNOXVILLE, Tenn. — As of Sept. 30, the Tennessee Valley Authority Retirement System's total employee benefit assets increased 23% from a year earlier.

Equity managers: Domestic — Geewax Terker; Mellon Capital; Morgan Grenfell; NCM; Newbold's; Rosenberg Institutional; and Sunbank Capital.

Fixed-income managers: Domestic — Duff & Phelps; W.R. Huff; Mellon Capital; and PIMCO.

Other manager: Lord Abbett.

The master trustee is Mellon Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Charles Roper, chairman of the board of directors; Jimmy Cross, chairman of the investment committee; and Larry Edwards, executive secretary.

Texaco Inc.

	($ millions)
Total assets	3,400
Defined benefit	1,300
Total defined contribution	2,100
Other	2,100
Internally managed assets:	
Total DB	120

WHITE PLAINS, N.Y. — As of Sept. 30, Texaco Inc.'s total employee benefit assets increased 3% from a year earlier. Defined benefit assets were unchanged during the same period; defined contribution assets increased 5%.

Equity managers: Domestic — Alliance; Mellon Capital; J.P. Morgan; and State Street Bank.

Fixed-income managers: Domestic — WR Lazard and J.P. Morgan.

Real estate managers: Aetna; Copley; Equitable; J.P. Morgan; Prudential; and Travelers.

Other managers: Aetna; Equitable; and Travelers.

The master trustee is Chase Manhattan; the investment consultant is Wilshire.

The key person overseeing the investment management of the fund is Shelby Faber, financial director.

Texas County & District Retirement System

	($ millions)
Total assets	2,509
Total defined contribution	2,509
Employer DC contributions	100
Internally managed assets	2,509
Defined contribution asset mix:	
Fixed income	100%

AUSTIN, Texas — As of Sept. 30, the Texas County and District Retirement System's total assets increased 9.2% from a year earlier. All assets are defined contribution.

Key personnel overseeing the investment management of the fund are J. Robert Brown, executive director, and Ronald Schultz, investment consultant.

Employees Retirement System of Texas

	($ millions)
Total assets	7,683
Defined benefit	7,683
Employer DB contributions	216
Benefit payments	224
Internally managed assets	7,683
Defined benefit asset mix	
Stocks	29%
Fixed income	70%
Cash equivalents	1%

AUSTIN, Texas — As of Sept. 30, the Employees Retirement System of Texas' total employee benefit assets increased 23.1% from a year earlier. All assets are defined benefit.

INVESCO MIM serves as equity adviser; Duff & Phelps is the fixed-income adviser.

The master custodian is NCNB Texas; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Charles D. Travis, executive director, and Nancy G. Goerdel, deputy director for investments.

Texas Municipal Retirement System

	($ millions)
Total assets	2,710
Total defined contribution	2,710
Internally managed assets	2,710
Defined contribution asset mix	
Fixed income	100%

AUSTIN, Texas — As of Sept. 30, The Texas Municipal Retirement System's total employee benefit assets increased 12.9% from a year earlier. All assets are defined contribution.

The master custodian is First City Bank, Austin; the investment consultant is Duff & Phelps.

Key personnel overseeing the investment management of the fund are Jimmie L. Mormon, director, and Preston G. Craig, investment officer.

Teacher Retirement System of Texas

	($ millions)
Total assets	29,477
Defined benefit	29,477
Employer DB contributions	786
Benefit payments	1,290
Internally managed assets	29,477
Defined benefit asset mix	
Stocks	46%
Fixed income	45%
Cash equivalents	1.5%
Real estate equity	0.5%
Mortgages	7%

AUSTIN, Texas — As of Sept. 30, the Teacher Retirement System of Texas' total employee benefit assets increased 24.2% from a year earlier. All assets are defined benefit.

The master custodian is Chemical Bank; the investment consultant is Wellington Management.

Key personnel overseeing the investment management of the fund are John-Carl, investment officer-equities; Gene Reichman, investment officer-real estate; and Jack Cooper, investment officer-fixed income.

Textron Inc.

	($ millions)
Total assets*	3,846
Defined benefit	2,853
Total defined contribution	993

*P&I estimate

PROVIDENCE, R.I. — As of Sept. 30, *Pensions & Investments* estimates Textron Inc.'s total employee benefit assets increased 29.8% from a year earlier. Defined benefit assets increased an estimated 35.3% during the same period; defined contribution assets increased 16.3%.

The key person overseeing the investment management of the fund is John Lemery, president of Textron Investment Management Co. Inc.

Trans World Airlines Inc.

	($ millions)
Total assets	2,567
Defined benefit	1,165
Total defined contribution	1,402
401(k)	223
ESOP	2
Other	1,177
Employer DB contributions	47
Benefit payments	49
Employer DC contributions	38
Internally managed assets	
Total DB	499
Defined benefit asset mix	
Stocks	36%
Fixed income	32%
Cash equivalents	27%
Real estate equity	2%
GICs/BICs	3%
Defined contribution asset mix	
Other stock	60%
Fixed income	8%
GICs/BICs	19%
Cash equivalents	7%
Real estate	6%

KANSAS CITY, Mo. — As of Sept. 30, Trans World Airlines Inc.'s total employee benefit assets increased 12.5% from a year earlier. Defined benefit assets increased 15.1% during the same period; defined contribution assets increased 10.4%.

Equity managers: Domestic — Estabrook; Federated; Fidelity Investments; Fort Hill; Frontier; GAMCO; J.P. Morgan; McGlinn; Mellon Capital; Shields; State Street Research; Twentieth Century/Investors Research; and Wells Fargo Nikko.

International — SBC; State Street Bank; Vanguard; and WorldInvest.

Fixed-income managers: Estabrook; Fidelity Investments; Fort Hill; GAMCO; McGlinn; PanAgora; Shields; Wellington; and Wells Fargo Nikko.

Real estate managers: Aetna; Citicorp; Coldwell Banker; INVESCO Realty; J.P. Morgan; NCNB; State Street Bank; and TCW.

GIC/BIC managers: Aetna; Boston Co.; and PRIMCO.

The master trustee and global custodian is Boston Safe.

Gary D. Dilley, director-pension finance, oversees investment management of the fund.

The Travelers Cos.

	($ millions)
Total assets	2,237
Defined benefit	1,621
Total defined contribution	616
401(k)/thrift	551
Other	65
Employer DB contributions	1
Benefit payments	68
Employer DC contributions	28
Internally managed assets	
Total DB	1,621
Total DC	616
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix	
Stocks	52%
Fixed income	7%
Cash equivalents	1%
Real estate equity	3%
GICs/BICs	37%
Defined contribution asset mix	
Company stock	32%
Other stock	8%
Fixed income	60%

HARTFORD, Conn. — As of Sept. 30, The Travelers Cos.' total employee benefit assets increased 13% from a year earlier. Defined benefit assets increased 10.3% during the same period; defined contribution assets increased 20.5%.

All assets are managed by Travelers Cos. and its affiliates.

The master trustee is Connecticut National Bank; the global custodian is Morgan Guaranty, Zurich.

Key personnel overseeing the investment management of the fund are Thomas O. Thorsen, vice chairman and chief financial officer; Robert W. Crispin, vice chairman and chief investment officer; and Thomas E. Keating, senior vice president.

TRW Inc.

	($ millions)
Total assets	3,313
Defined benefit	2,199
401(k)	1,114
Employer DB contributions	53
Benefit payments	136

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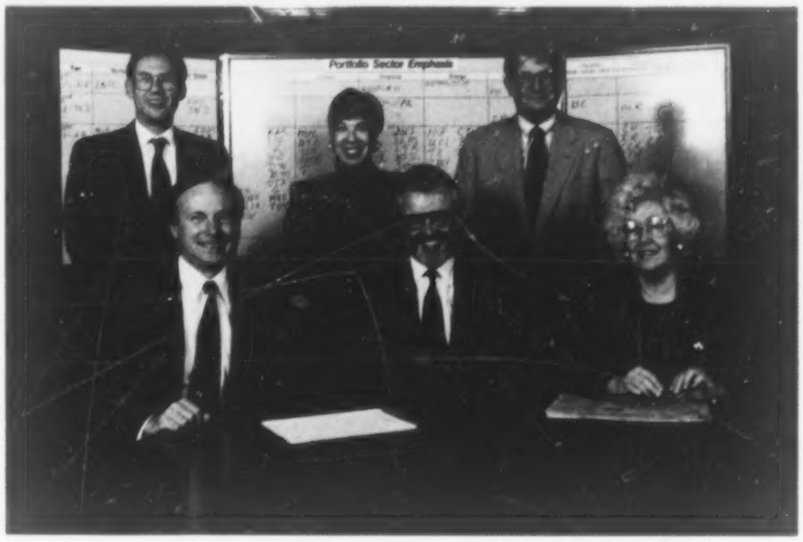

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Employer DC contributions	33
Internally managed assets:	
Total DB	142
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	61%
Fixed income	34.8%
Cash equivalents	4.2%
Defined contribution asset mix:	
Company stock	41.7%
Other stock	19.4%
GICs/BICs	38.9%

CLEVELAND — As of Sept. 30, TRW Inc.'s total employee benefit assets increased 19% from a year earlier. Defined benefit assets increased 19% during the same period; defined contribution assets increased 19.1%.

Equity managers: Domestic — Alliance; Baring America; Sanford Bernstein; Investment Counselors of Maryland; PanAgora; Westwood; and Wilshire.

International — Baring International; Ivory & Sime; and PanAgora.

Fixed-income managers: Domestic — Hoisington; PIMCO; and PanAgora.

International — J.P. Morgan and Morgan Grenfell.

The master trustee is Boston Safe.

The key person overseeing the investment management of the fund is Robert M. Hamje, president, TRW Investment Management.

U

Union Carbide Corp.

	($ millions)
Total assets	3,174
Defined benefit	2,404
Total defined contribution	770
401(k)	280
Thrift/savings	471
ESOP	19
Employer DB contributions	50
Benefit payments	94
Internally managed assets:	
Total DB	2,404
Total DC	726
Defined benefit asset mix:	
Stocks	34%
Fixed income	57%
Cash equivalents	2%
Real estate equity	6%
Annuities	1%
Defined contribution asset mix:	
Company stock	12.3%
Other stock (ESOP)	2.4%
GICs/BICs	75.6%
Other	9.6%

DANBURY, Conn. As of Sept. 30, Union Carbide Corp.'s total employee benefit assets increased 21.7% from a year earlier. Defined benefit assets increased 23.7% during the same period; defined contribution assets grew 16%.

Equity manager: Fidelity Investments.

The master trustee is Manufacturers Hanover.

Key personnel overseeing the investment management of the fund are Michael F. Hoben, president of Benefit Capital Management, a wholly owned subsidiary of Union Carbide; Lawrence R. Fuller, senior vice president-equities, Benefit Capital; and Robert Burstein, senior vice president-fixed income, Benefit Capital.

Unisys Corp.

	($ millions)
Total assets	4,998
Defined benefit	3,218
401(k)	1,780
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	61%
Fixed income	15%
Cash equivalents	2%
Real estate equity	11%
GICs/BICs	5%
Other	6%
Defined contribution asset mix:	
Company stock	6%
Other stock	18%
GICs/BICs	61%
Cash equivalents	5%
Other	10%

BLUE BELL, Pa. — As of Sept. 30, Unisys Corp.'s total employee benefit assets increased 10.2% from a year earlier. Defined benefit assets increased 14.5% during the same period; defined contribution assets increased 3.3%.

Defined benefit managers: Advanced Investment; Aetna; Fred Alger; Amerindo; AMLI Southwest; Baker Nye; Bankers Trust; BEA; Blackstone Capital; Blackstone Financial; Chase; Chemical Bank; Coldwell Banker; Connecticut General Real Estate; County NatWest; GE Investment; Geewax, Terker; Hancock; Harris Trust; Independent Investment; Jacobs, Levy; JMB; LaSalle; Lazard Freres; Carl Marks; Mercator; Metropolitan; Nicholas-Applegate; Norton Partners; NWQ; Pacific Financial; Parametric; T. Rowe Price Venture Fund; PRIMECAP; RCB; Recovery Equity Investors; Robertson Colman; Rosenberg Equity; M.D. Sass; Smith Breeden; Travelers Insurance; TIMCO; Twin Capital; United Capital; Ventures Trident; Walsh Greenwood; Wellington Trust; Wells Fargo Nikko; and Western Asset.

Defined contribution managers: Allstate; Brinson; Confederation Life; Connecticut General; Executive Life; Northern Trust; Manufacturers Hanover; Metropolitan Life; Mutual Benefits Life; Pacific Mutual Life; Principal Mutual Life; Provident National Assurance; Prudential Insurance; Rogers, Casey; Seafirst Bank; State Mutual Life; State Street Bank; Sunlife of America; Travelers Insurance; Union Central Life; and Wells Fargo Nikko.

The master trustee and global custodian for the defined benefit plan is Harris Trust; the master trustee for the defined contribution plan is Mellon; the investment consultant is Rogers, Casey.

Charles A. Service, corporate director-trust investments, oversees investment management of the fund.

United Airlines Inc.

	($ millions)
Total assets	4,800
Defined benefit	2,600
Total defined contribution	2,200
401(k)	600
Thrift/savings	1,600
Employer DB contributions	84
Benefit payments	105
Employer DC contributions	90
Defined benefit asset mix:	
Stocks	50%
Fixed income	40%
Cash equivalents	5%
Real estate equity	5%
Defined contribution asset mix:	
Other stock	35%
Fixed income	65%

CHICAGO — As of Sept. 30, United Airlines Inc.'s total employee benefit assets increased 20% from a year earlier. Defined benefit assets increased 23.8% during the same period; defined contribution assets increased 15.8%.

The master trustee is National Bank of Detroit.

David J. Dykstra, director-pension assets, oversees investment management of the fund.

General Board of Pensions of the United Methodist Church

	($ millions)
Total assets	4,333
Defined benefit	1,760
403(b)	2,573
Employer DB contributions	0
Benefit payments	126
Employer DC contributions	191
Internally managed assets:	
Total DB	108
Total DC	133
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	56%
Fixed income	25%
Cash equivalents	10%
Real estate equity	3%
GICs/BICs	6%
Defined contribution asset mix:	
Stock	58%
Fixed income	24%
GICs/BICs	5%
Cash equivalents	10%
Real estate equity	3%

EVANSTON, Ill. — As of Sept. 30, the General Board of Pensions of the United Methodist Church's total employee benefit assets increased 25.3% from a year earlier. Defined benefit assets increased 1.8% during the same period; defined contribution assets increased 48.7%.

Equity managers: Domestic — ANB; Ariel; Batterymarch; Capital Guardian; Columbus Circle; Delaware Investment; Fidelity Management Trust; Fisher Investments; Franklin Research; INVESCO MIM; Nicholas-Applegate; Olympic Capital; Provident Investment; RCM; Sit Investment; Westwood.

International — Capital Guardian.

Fixed-income managers: Domestic — ANB; CIGNA; Criterion; Delaware; Franklin Research; Lincoln Capital; Mellon Bond; STW.

Real estate managers: CIGNA; Community Investment; Enterprise Foundation; JMB; Local Initiatives Managed Assets; Neighborhood Housing Services.

The master custodian and global custodian is Mellon Bank; the investment consultant is Hotchkiss Associates.

Key personnel overseeing the investment management of the fund are F. Gale Whitson-Schmidt, chief financial officer and treasurer, and Mary Pat Kincaid, director-portfolio department.

UMWA Health & Retirement Funds

	($ millions)
Total assets	5,562
Defined benefit	5,524
401(k)	38
Internally managed assets:	
Total DB	695
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	65%
Fixed income	30%
Cash equivalents	1%
Real estate equity	4%
Defined contribution asset mix:	
Stock	42%
Fixed income	9%
GICs/BICs	22%
Cash equivalents	27%

WASHINGTON — As of Sept. 30, the UMWA Health and Retirement Fund's total employee benefit assets increased 16.9% from a year earlier. Defined benefit assets increased 16.7% during the same period; defined contribution assets increased 58.3%.

Equity managers: Domestic — Argus; Barrow, Hanley; Capital Guardian; Dimensional; Dreman; Lazard Freres; J & W Seligman; T. Rowe Price; Wells Fargo.

Fixed-income managers: Domestic — Criterion; Loomis, Sayles; STW.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are Charles Stephens, treasurer and director of investments; Donna K. Anderson, Robert C. Leslie and Enos T. Throop, senior investment advisers; and Mary M. Merrill, manager-money and banking.

United Nations Joint Staff Pension Fund

	($ millions)
Total assets	9,798
Defined benefit	9,798
Employer DB contributions	394
Benefit payments	505
Internally managed assets	9,798
Defined benefit asset mix:	
Stocks	46%
Fixed income	39%
Cash equivalents	6%
Real estate equity	9%

NEW YORK — As of Sept. 30, the United Nations Joint Staff Pension Fund's total employee benefit assets increased 14% from a year earlier. All assets are defined benefit.

The trustee is U.N. Secretary General; the global custodians are Royal Bank of Scotland and Fiduciary Trust Co. International; the latter also provides global investment advice.

Key personnel overseeing the investment management of the fund are J. Richard Foran, representative of the secretary-general on investments; and Henry L. Ouma, chief-investment management services.

United Parcel Service of America Inc.

	($ millions)
Total assets	2,534
Defined benefit	1,240
Total defined contribution	1,294
401(k)	271
Thrift/savings	1,023
Employer DB contributions	61
Benefit payments	18
Employer DC contributions	31
Internally managed assets:	
Total DB	97
Total DC	141
Defined benefit asset mix:	
Stocks	47%
Fixed income	22%
Cash equivalents	15%
GICs/BICs	8%
Other	8%
Defined contribution asset mix:	
Company stock	6%
Other stock	20%
Fixed income	20%
GICs/BICs	36%
Cash equivalents	13%
Other	5%

ATLANTA — As of Sept. 30, United Parcel Service of America Inc.'s total employee benefit assets increased 25.1% from a year earlier. Defined benefit assets increased 28.2% during the same period; defined contribution assets increased 22.2%.

Equity managers: Domestic — Bankers Trust; Sanford Bernstein; Connecticut National; First Fidelity; Mitchell Hutchins; and J.P. Morgan.

Fixed-income managers: Domestic — Bankers Trust; Sanford Bernstein; Connecticut National; First Fidelity; Mitchell Hutchins; and J.P. Morgan.

GIC managers: Equitable and Metropolitan Life.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are Scott Davis, treasury manager; Robert Markmann, investments manager; and Bruce Bissell, investments supervisor.

United Technologies Corp.

	($ millions)
Total assets	9,212
Defined benefit	6,312
Thrift/savings	2,900
Employer DB contributions	21
Benefit payments	284
Employer DC contributions	273
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	56%
Fixed income	30%
Cash equivalents	3%
Real estate equity	6%
Other	5%
Defined contribution asset mix:	
Company stock	3%
Other stock	6%
Fixed income	90%
Other	1%

HARTFORD, Conn. — As of Sept. 30, United Technologies Corp.'s total employee benefit assets increased 15.7% from a year earlier. Defined benefit assets increased 16.9% during the same period; defined contribution assets increased 16%.

The master trustee and global custodian is Citibank; the investment consultant is Ennis, Knupp.

The key personnel overseeing the investment management of the fund are Michael J. Vrissis and James C. Goodridge, pension investment managers.

United Telecommunications

	($ millions)
Total assets	1,969
Defined benefit	1,433
401(k)	536
Employer DB contributions	0
Benefit payments	36
Employer DC contributions	28
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

KANSAS CITY, Mo. — As of Sept. 30, United Telecommunications Inc.'s total employee benefit assets increased 24% from a year earlier. Defined benefit assets increased 22.7% during the same period; defined contribution assets increased 27.6%.

Investment managers: Barnett Banks; Barrow, Hanley, Mewhinney and Strauss; Brinson Partners; Cursitor-Eaton; DFA; Equitable Real Estate; Fischer, Francis; Grantham, Mayo; Jennison Associates; Mitchell Hutchins; J.P. Morgan; NCNB; PIMCO; T. Rowe Price; Rowe Price-Fleming; Provident; Sasco; Sit Investment; Wall Street Associates; Wellington; Wells Fargo Nikko.

The master trustee and global custodian is Northern Trust; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is W.N. Searcy, pension and savings trust officer.

USAir Inc.

	($ millions)
Total assets*	2,636
Defined benefit	2,630
Total defined contribution	6

**P&I estimate*

ARLINGTON, Va. — As of Sept. 30, *Pensions & Investments* estimates USAir Inc.'s total employee benefit assets increased 76.6%.

Stuart Tuchman, assistant vice president-pensions and insurance, oversees investment management of the fund.

U S WEST Inc.

	($ millions)
Total assets	9,370
Defined benefit	7,720
401(k)	1,650
Employer DB contributions	0
Benefit payments	1,032
Internally managed assets:	
Total DB	1,758
Defined benefit asset mix:	
Stocks	59%
Fixed income	33%
Cash equivalents	1%
Mortgages	7%
Defined contribution asset mix:	
Company stock	53%
Other stock	18%
GICs/BICs	20%
Other	9%

ENGLEWOOD, Colo. — As of Sept. 30, U S WEST's defined benefit assets decreased 3.5% from *P&I*'s estimate for a year earlier.

The master trustee and global custodian is Boston Safe.

Key personnel overseeing the investment management of the fund are James J. Biundo, executive director, trust investment management; Mary Beth Gorrell, Jim Belquist and Steve Crosby, directors; and Don Butt, manager.

USX Corp.

	($ millions)
Total assets	9,850
Defined benefit	9,420
Profit-sharing	430
Employer DB contributions	0
Benefit payments	910
Employer DC contributions	20
Internally managed assets:	
Total DB	9,420
Total DC	430
Defined benefit asset mix:	
Stocks	56.4%
Fixed income	31%
Cash equivalents	9.4%
Real estate equity	2.7%
Mortgages	0.3%
Oil/Mineral royalties	0.2%
Defined contribution asset mix:	
Company stock	42%
Other stock	6%
Fixed income	9%
GICs/BICs	38%
Other	4%

PITTSBURGH — As of Sept. 30, USX Corp.'s total employee benefit assets increased 12.6% from a year earlier. Defined benefit assets increased 12.4% during the same period; defined contribution assets increased 16.2%.

The master custodians are J.P. Morgan and U.S. Trust.

Key personnel overseeing the investment management of the fund are Gary A. Glynn, president, and Peter C. Lincoln, vice president-investments.

Utah State Retirement Fund

	($ millions)
Total assets	4,900
Defined benefit	4,700
Defined contribution	200
Employer DB contributions	160
Benefit payments	150
Internally managed assets	
Total DB	2,700
Defined benefit asset mix	
Stocks	53%
Fixed income	35%
Cash equivalents	2%
Real estate equity	6%
Venture capital/LBOs	4%

SALT LAKE CITY — As of Sept. 30, the Utah State Retirement Fund's total assets increased 27.3% from a year earlier. Defined benefit assets increased 22.1%.

Equity managers: Domestic — Atalanta/Sosnoff; DFA; Morgan Stanley; J & W Seligman; Smoot Miller & Cheney; UBS; Value Line; Wellington.

International — Baring International; State Street Bank.

Real estate managers: Aetna; Alex. Brown; Equitable; JMB; Metric; Sentinel.

The master and global custodian is Northern Trust; the investment consultants are Callan and SEI.

Key personnel overseeing the investment management of the fund are W. Dan Smith, investment officer, and Richard Cherry, assistant investment officer.

V

Virginia Retirement System

	($ millions)
Total assets	13,300
Defined benefit	13,300
Employer DB contributions	759
Benefit payments	473
Internally managed assets	
Total DB	718
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Short selling	
Defined benefit asset mix	
Stocks	58.8%
Fixed income	28.9%
Cash equivalents	6.8%
Real estate equity	4.7%
Managed Futures	0.8%

RICHMOND, Va.— As of Sept. 30, the Virginia Retirement System's total employee benefit assets increased 24.5% from a year earlier. All assets are defined benefit.

Equity managers: Acadian; Ardsley Partners; Bankers Trust; Capital Growth; Clay-Finlay; Concord Capital; Davis, Weaver & Mendel; Delaware Investment; Evaluation Associates; Fidelity Management; GAMCO; GeoCapital; HD International; Hutson; IDS Advisory; Investment Research; J.P. Morgan; Jacobs Levy; Jundt; Lehman Ark; Lincoln Capital; Mellon Capital; Merrill Lynch; Negative Beta; Nicholas Applegate; Numeric Investors; Pacific Financial; Progress; Rosenberg Institutional; Rowe-Price Fleming; Donald Smith; State Street Bank; Tukman.

Fixed-income managers: Sanford Bernstein; MacKay-Shields; Massachusetts Financial; Merganser; Security Capital; Sovran Capital; Western Asset.

Managed Futures: Hart Bornhoft; Kenmar; Pegasus Partners.

Other Managers: Boston Safe; Brinson Partners; Chilmark Partners; Clayton & Dublier; Forstman Little; Hellman & Friedman; Joseph Littlejohn & Levy; New Enterprise Associates; Olympus Private Placement; TCW; E.M. Warburg; J.H. Whitney & Co.

The master custodian and global custodian is Boston Safe; the investment consultants are PCA; Rogers, Casey; Sharpe; and RP.

Key personnel overseeing the investment management of the fund are John M. McLaren, managing director-alternative investments; Nancy C. Everett, managing director-fixed income and international equity; Garry Allen, managing director-domestic equity; and Thomas Hassard, managing director-real estate.

W

Washington State Investment Board

	($ millions)
Total assets	15,640
Defined benefit	15,640
Internally managed assets	
Total DB	6,082
Hedging devices used	
Stock index futures	
Defined benefit asset mix	
Stocks	35%
Fixed income	33%
Cash equivalents	6%
Real estate equity	7%
Other	19%

OLYMPIA, Wash. — As of Sept. 30, the Washington State Investment Board's total employee benefit assets increased 21.8% from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Columbia; Hotchkis & Wiley; Kenwood Group; Lord, Abbett; Donald Smith; United Capital; Zevenbergen Capital.

International — Cursitor-Eaton.

Real estate managers: Centennial; Copley; Equitable; Pactrust; PMR; RREEF; Quadrant; Sentinel; Shurgard; UNICO; Winmar.

Venture capital/LBO managers: Brentwood; Cable & Howse; Desai; Energy Recovery; Hancock; Investech; KBA; KKR; Menlo Venture; Paragon; Phoenix; Pierce Nordquist.

The master trustee and global custodian is Bank of New York; the investment consultant is Frank Russell.

Basil Schwann, executive director, oversees investment management of the fund.

Westinghouse Electric Co.

	($ millions)
Total assets	6,667
Defined benefit	4,060
Total defined contribution	2,607
401(k)	569
Thrift/savings	2,038
Employer DB contributions	200
Benefit payments	565
Employer DC contributions	58
Internally managed assets	
Total DB	1,622
Total DC	2,533
Hedging devices used	
Stock options	
Stock index futures	
Short selling	
Defined benefit asset mix	
Stocks	60.3%
Fixed income	21.7%
Cash equivalents	3%
Real estate equity	11.3%
Mortgages	3.7%
Defined contribution asset mix	
Company stock	9%
Other stock	3%
GICs/BICs	88%

PITTSBURGH — As of Sept. 30, Westinghouse Electric Co's total employee benefit assets increased 20% from a year earlier. Defined benefit assets increased 15.4% during the same period; defined contribution assets increased 28.1%.

Equity managers: Domestic — Advanced Investment; Brandywine; Columbus Circle; Equinox; Jennison; J.P. Morgan.

International — Clay Finlay; State Street.

Fixed-income managers: Domestic — MacKay-Shields; Pioneering; Putnam.

Real estate managers: Citibank; Equitable; JMB; Mellon/McMahan.

The master trustee and global custodian is Mellon Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Thomas G. Scannell, director-pension investments; Joanne S. Welsh, manager-pension investments; and Nancy A. Nemeth, trust investments analyst.

State of Wisconsin Investment Board

	($ millions)
Total assets	22,790
Defined benefit	22,790
Employer DB contributions	709
Benefit payments	724
Internally managed assets	
Total DB	21,179
Hedging devices used	
Bond options	
Fixed-income futures	
Defined benefit asset mix	
Stocks	52%
Fixed income	41%
Cash equivalents	1%
Real estate equity	3%
Mortgages	1%
LBO/venture capital	2%

MADISON, Wis. — As of Sept. 30, the State of Wisconsin Investment Board's total employee benefit assets increased 23.3% from a year earlier. All assets are defined benefit.

Equity managers: International — Capital Guardian; GE Investments; Mercator; Morgan Stanley.

Fixed-income managers: International — Alliance Capital; Deutsche Asset; Morgan Grenfell; Nomura.

The master custodian is Morgan Guaranty; the global custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Patricia Lipton, executive director, and James Severance, assistant executive director.

The International Bank for Reconstruction and Development (World Bank)

	($ millions)
Total assets	3,950
Defined benefit	3,950
Employer DB contributions	89
Benefit payments	74
Hedging devices used	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix	
Stocks	65.9%
Fixed income	26.2%
Cash equivalents	0.7%
Real estate equity	4.8%
Other	2.4%

WASHINGTON — As of Sept. 30, the total employee benefit assets of the International Bank for Reconstruction and Development (World Bank) increased 24.6% from a year earlier. All assets are defined benefit.

The master trustee is State Street Bank; the global custodians are State Street and Northern Trust; the investment consultant is Strategic Investment Partners.

Key personnel overseeing the investment management of the fund are Nestor V. Santiago, director-pension department, and Kelda Caldwell, chief-investment control unit.

X

Xerox Corp.

	($ millions)
Total assets*	3,780
Defined benefit	2,705
Total defined contribution	1,075
Employer DB contributions	0
Employer DC contributions	13

**as of June 30, 1991*

Hedging devices used	
Stock index futures	
Defined benefit asset mix	
Stocks	63%
Fixed income	12%
Cash equivalents	10%
Real estate equity	8%
GICs/BICs	7%
Defined contribution asset mix	
Company stock	3%
Other stock	18%
Fixed income	3%
GICs/BICs	69%
Cash equivalents	3%
Other	4%

STAMFORD, Conn. — As of June 30, Xerox Corp.'s total employee benefit assets increased 13.4% from Sept. 30, 1990. Defined benefit assets increased 18.3% during the same period; defined contribution assets increased 2.8%.

Equity managers: Domestic — Ardsley; Aster; Birmingham; Charter Oak; Cypress; Disciplined Investment; First Pacific; Freiss Associates; Geewax Terker; GeoCapital; Hellman Jordan; Pilgrim Baxter Greig; Quest; RCM; Schafer; Donald Smith; Sound Shore; Steinberg Asset; TCW; Trinity; Tweedy Brown; Westport; Westwood.

International — Arnhold and S. Bleichroeder; Capital Guardian; Grantham Mayo; Rowe Price Fleming.

Fixed-income managers: Domestic — Cypress; W.R. Huff; Jennison; RCM.

Real estate managers: JMB; RREEF; TCW.

Other managers: GE Investments; Horsley Keogh; TCW.

The master trustee and global custodian is State Street Bank; the investment consultants are Collins and Frank Russell.

Key personnel overseeing the investment management of the fund are Robert R. Evans, assistant treasurer; Mary Cahill, manager, trust investments; Gerald J. Paolini, manager-trust investment strategy; and Toni Hanna, trust investment analyst.

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Internal

Continued from page 17

been dramatic changes, said Lawrence Unrein, investment director.

Among the alternative investments AT&T manages internally are venture capital, natural resource investments and corporate finance investments.

Part of the increase in the alternative asset category was due to bringing assets in-house that had been managed externally, said Mr. Unrein.

Among *P&I*'s Top 200 pension funds, defined benefit assets managed internally increased 12% to nearly $549 billion from $490.4 billion.

Defined contribution assets managed internally by the Top 200 funds increased 25.4% to $161.2 billion from $128.5 billion.

Most of the increase among both types of plans, however, is due to strong returns the equity and fixed-income sectors posted in 1991.

For the year ended Sept. 30, internally managed defined benefit equity assets decreased 5% when adjusted to market appreciation. Long-term fixed-income assets — the largest internally managed asset class among defined benefit plans — increased less than 1% when adjusted for market appreciation.

Among defined contribution plans, internally managed equity investments held steady after adjustment for market appreciation.

Internally managed defined contribution fixed-income assets decreased 31.1% on a market-adjusted basis. ■

Overseas

Continued from page 17

the market-adjusted gain was 55%.

Foreign bond holdings among defined contribution plans advanced 31.5% to $551 million, or 16.4% when adjusted for the returns from international markets. In the previous 12 months, the market-adjusted gain was 12½%.

Consultants cited a variety of reasons for the lower level of dollar outlays. The effects of "the (Persian Gulf) war were one reason, but I don't think it was the primary one," said Bobbie Parkhill, a principal with the consulting firm of Ennis, Knupp & Associates, Chicago. "I suspect many plan sponsors made initial international allocations over the previous two to three years and were attempting to let the dust settle and see how these investments turned out."

Solely on market gains, the $2.3 billion defined benefit fund of Owens-Illinois Inc., Toledo, Ohio, posted a 19.4% growth in its international equities holdings, which brought the international equities total to $383 million, said Ronald Boller, the company's director-benefit and risk finance. Some assets were extracted to pay for pension benefits, trimming the fund's international stock holdings to $361 million as of Sept. 30.

The fund, however, did add to its international bond outlays. Its foreign fixed-income holdings rose to $102 million from $71 million as of Sept. 30, 1990. To handle its additional foreign bond investments, the fund hired the London office of Fischer Francis Trees & Watts Inc. early in 1991.

Also among the funds making initial international investments in 1991 was the $4.3 billion Louisiana Teachers' Retirement System. As of Sept. 30, the fund had invested $100 million in foreign stocks and $10 million in foreign bonds. The latter was done at the request of a domestic fixed income manager — New York-based Scudder, Stevens & Clark — "with expertise in foreign bonds who asked for the authority to invest a certain percent overseas," said Jennifer Netterville, the fund's investment officer.

Diversification was the main motive behind the foreign stock investments. The fund also saw the allocation as a way to expand overall equity holdings. A 1990 asset allocation study had "pointed to the desire for more equities and for foreign investments," said Ms. Netterville, who added the fund is targeting a 55% equities exposure. Total stocks now comprise about 42%.

The fund hired Scudder, Stevens & Clark and Batterymarch Financial Management, Boston, giving them each $50 million for broad international equity assignments. With its 10% target for international stock holdings, the fund plans to expand its foreign holdings over time, said Ms. Netterville.

The New Jersey Division of Investments made a substantial plunge into foreign bond investments for its $31 billion defined benefit fund. Given the fund's South Africa-free investing requirements, its decision to begin abroad with foreign bonds was the "easiest way to establish an international investing culture here . . . we could move right into the markets," said Deputy Director Anthony Arcuni. This year, however, the division expects to begin foreign stock investing.

With foreign bonds, the division invests in government securities and international agency issues. It manages these and all of its investments in-house. Mr. Arcuni said the division was "satisfied with the results of these investments during calendar year 1991." Compared with international stocks, foreign "fixed income was clearly the place to be" last year.

While executives of the $1.9 billion Missouri State Employees' Retirement System last summer approved a 5% allocation for international equities, it never was funded. Fund officials are hoping a highly restrictive South Africa-free investing law scheduled to take effect in September will be repealed.

"Rather than investing for 18 months, knowing that we couldn't continue (with the international investing program), we said we'd wait and see what happens" about the South Africa-free law, explained M. Steve Yoakum, the fund's executive director.

He said a bill that would repeal the South Africa-free investing requirements has been introduced into the Missouri Legislature. ■

Indexing

Continued from page 18

in the city comptroller's office.

"We indexed to the Russell 3000 to get a broad representation from the equity market," said Candace Cox of the comptroller's office investment strategy group. She said that with institutions the size of the teachers' fund, indexing will continue to play a major role.

However, Ron Jones, a partner with Hewitt Associates, Lincolnshire, Ill., said the strong growth might level off because of the strong performance of active managers. More than half of active managers outperformed the S&P 500, the nameplate index, in calendar 1991.

"My guess is that indexing will continue to grow but at a decelerating rate," he said.

"The performance factor (for using indexing) is going to be a little less important."

Mr. Jones said, however, the proliferation of new indexing techniques makes indexing a lasting strategy, no matter how good active management performance is.

"Indexing today just doesn't mean the S&P 500," he said. "The widening range of index alternatives means that indexing has more staying power. It will continue to be a large factor, though the S&P will be a little less hot."

The number of the Top 200 funds using indexing grew during the year ended Sept. 30. Among the Top 200 with defined benefit plans, 122 used equity indexing, up from 112 the year before. Another 52 reported using bond indexing, up from 46 the year before.

Among plans with defined contribution assets, 58 reported using equity indexing as of Sept. 30, up from 49 the year before, while 10 reported bond indexing, compared with nine a year earlier.

Among defined benefit plans, indexing by the Top 200 funds grew a revised 30.4% to $277 billion. Defined contribution plans' indexing jumped 43%, to $40.2 billion as of Sept. 30.

According to Dano Bartolai, principal with William M. Mercer Inc., Chicago, indexing in the fast-growing defined contribution market is very attractive because the investments are marked to market, are cheap and are "really easy to communicate to employees." ■

Rankings

Continued from page 18

cause we have separated that decision and can demonstrate that we have done that, it has helped" win new clients.

"Most people sophisticated enough to go international are sophisticated enough to understand currency risk," said Capital Guardian's Mr. Ronus. "A lot of them went international in 1985, deliberately enhancing their non-dollar exposure, but once the dollar went down, people got more concerned," he said.

"Clearly with the dollar at this low level, we're watching it very closely," Mr. Ronus said. "A big concern is the low interest rates," he explained. "That attracts capital out of the U.S. dollar and it makes the cost of hedging higher."

Interestingly, lower interest rates also prompted new requirements placed on domestic bond managers by fund sponsors, managers said.

"Funds are tending to specify more in terms of their durational bogies," said William H. Gross, managing director at Pacific Investment Management Co., Newport Beach, Calif. PIMCO this year was the top domestic bond manager, mentioned 25 times by pension fund executives.

"It's this fear that if interest rates dropped, their liability stream would increase rapidly because the discount rate dropped and then they would want to match that," he explained, adding, "That's certainly been the correct assumption."

Patricia Dunn, president of Wells Fargo Nikko Investment Advisors, San Francisco, also pointed to specific durational requirements as "a sort of new requirement in 1991." Wells Fargo Nikko, an index fund manager, was the second most cited manager overall, the top manager in domestic equities and No. 4 in domestic bonds, tying there with Mellon Bank, Pittsburgh.

"On the fixed-income side we've added a lot in new business this year," she said. "It reflects a product strategy that we put into place in 1990 that takes the U.S. bond market and breaks it down into its meaningful modules (such as long Treasuries, short corporates, intermediate corporates, etc.) and then permits investors to tailor investments to their needs," Ms. Dunn said.

She explained that the increased concern with meeting durational targets has been part of the trend that drew in new business in 1991.

"There's a customization (in the Wells Fargo funds) that allows the plan sponsor to tailor their fixed-income (investments) to their desired duration," she said.

As far as equity investment goes, Ms. Dunn said she had seen increased interest in small-cap indexing in 1991. "I guess anything beyond the S&P 500 performed well, and those are the areas of most current interest," she said.

Ms. Dunn also pointed to the increasing interest in global investing. Although her firm ranked at the top in domestic equities according to the *P&I* survey, Ms. Dunn said her firm expanded mostly in international assignments in 1991.

P&I's rankings of most-hired money managers was compiled by asking the top 200 pension funds for lists of their money managers in each asset class. If a manager is hired by a fund in more than one asset class, each mention counts in the overall ranking. ■

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Leading index fund managers

($ millions)

Company	Total	Domestic equity	Domestic fixed income	Int'l equity	Int'l fixed income
Wells Fargo Nikko	102,002	62,100	29,300	10,500	102
Bankers Trust	66,611	51,400	10,000	4,800	411
State Street *	33,000	19,200	2,300	11,200	300
Mellon Capital	30,846	24,136	6,111	599	0
ANB	13,752	11,247	1,769	736	0
PanAgora	10,751	6,511	3,151	1,054	35
Alliance	10,128	9,000	28	1,100	0
Mellon Bond	7,900	0	7,900	0	0
Lincoln Capital	7,900	0	7,900	0	0
Vanguard	6,875	5,810	830	235	0
GE Investment	6,950	6,950	0	0	0
Dimensional Fund	5,834	4,200	844	758	32
Wilshire	5,700	5,700	0	0	0
Manufacturers National	4,831	3,965	57	809	0
Pacific Investment	4,300	1,400	2,900	0	0
T. Rowe Price	4,260	750	3,065	0	445
UBS (Chase)	3,100	1,800	800	500	0
Northern Trust	2,434	2,032	380	0	22
First Wisconsin	2,105	160	1,945	0	0
PDI	2,080	1,828	0	252	0
BEA **	1,746	1,746	0	0	0
Travelers	1,741	978	360	373	30
Advanced Investment	1,614	1,600	14	0	0
Ryan Labs	1,600	0	1,600	0	0
Prudential Fixed	1,570	0	1,570	0	0
Boston International	1,450	0	0	1,450	0
Putnam *	1,425	0	1,425	0	0
Chancellor Capital **	1,237	1,035	169	33	0
Axe Core	1,151	629	0	522	0
Sears	1,146	1,100	0	46	0
CIGNA **	1,121	1,081	40	0	0
Security Capital	1,088	0	903	0	185
Aetna Life **	1,092	573	158	361	0
Atlantic Portfolio	1,006	0	1,006	0	0
Fidelity	983	944	39	0	0
Lehman Ark *	974	0	974	0	0
NCNB - Texas	831	831	0	0	0
WR Lazard	806	0	806	0	0
AMR Capital	780	780	0	0	0
Boatmen's	730	605	125	0	0
Mitchell Hutchins	730	119	611	0	0
Harris Trust ***	475	475	0	0	0
Old Kent	462	462	0	0	0
Associated Capital	420	307	113	0	0
Nikko Capital	418	172	0	246	0
Bear Stearns	376	0	376	0	0
NBD *	355	355	0	0	0
Monitor Capital ***	333	180	108	45	0
Todd Investment	285	0	285	0	0
Rushmore	230	230	0	0	0
Metropolitan Life	218	218	0	0	0
RhumbLine	89	43	0	46	0
TOTAL	358,781	231,696	89,763	35,765	1,562

* As of Sept. 30 ** As of Dec. 31 *** As of May 31 [illegible]

Growth in indexing slows dramatically

By Fred Williams

The major long-term flow of assets into index funds slowed greatly during the six months ended Dec. 1.

Total indexed assets for the 52 leading index fund managers surveyed by *Pensions & Investments* increased 4.9% to $358.8 billion from $342 billion May 31. But the rate of growth was far below the more than 25% increase experienced during the previous six-month period.

As in previous periods, international equity indexing continued to show the highest level of asset gains. International equity indexed assets were up 11%, to $35.765 billion, compared with a more than 35% increase in the previous period. Adjusted for the −2.8% decline in the Morgan Stanley Capital International Europe Australia Far East Index, international equity indexing showed even better gains, up by 14% as of Dec. 1, indicating continued strong demand for international equities.

Industry sources believe the high level of interest in international indexing is primarily from midsize pension funds trying to gain access to international stocks without going through the process of finding a specialized international manager.

Domestic equity indexing growth levels stayed fairly even. Total indexed domestic equity assets grew a minute 3% to $231.7 billion for the six months. When adjusted for the −2.2% drop in the Standard & Poor's 500 Stock Index for the period, domestic equity indexed assets were up 5.3%. For the six months ended May 31, domestic equity indexed assets had increased a market adjusted 5.8%.

Domestic equity indexing is expected to remain popular among plan sponsors, who view the process as a low-cost option to active management, according to pension consultants. J. Gregg Buckalew, consultant with Wyatt Asset Services Inc., Atlanta, said equity indexing is gaining popularity by plans as a core portfolio around which they build active equity strategies.

On the fixed-income side, domestic fixed-income assets increased 7.5% to $89.8 billion. Adjusted for the 7.64% rise in the Lehman Brothers Government/Corporate Bond Index for the period, domestic fixed-income assets dropped minimally, 0.2%.

International fixed-income assets increased 16.7% to $1.562 billion, or a market adjusted 6.2% increase. The Salomon Brothers World Government Bond Index was up 9.89% for the six months ended Dec. 1.

Wells Fargo Nikko Investment Advisors, San Francisco, retained its position as the largest index fund manager, and became the first index manager surveyed to surpass $100 billion in assets, reporting $102 billion.

Industry observers were caught off guard by the apparent slowing of overall index fund growth.

Mr. Buckalew said he could not account for the slowdown, claiming indexing remains a popular core equity holding and is a low-cost method of matching the market return on a portion of portfolio assets.

The continued strong interest in international indexing, however, was not surprising. Consultants and managers believe this trend will continue.

Carol Zipkin, senior vice president at Alliance Capital Management L.P., New York, said there is strong interest in international indexing by plan sponsors "looking to get their feet wet in international equities."

In addition, she said, there is interest by offshore investors, primarily in Canada and Australia, in both generic and enhanced index products.

Mr. Buckalew said most of the growth in international equity indexing is by small to midsize pension plans interested in entering the international markets and that larger and more experienced plans "are probably not as inclined to stick with indexing and are more interested in active management of international stocks."

He said the interest by offshore investors in enhanced domestic equity indexing is probably the same philosophy in reverse as U.S. investors not familiar with the foreign equity markets opting to buy "the market" as a way to gain exposure.

Several index fund managers said interest has been running high in enhanced indexed products in which futures and options are used to boost the returns on indexed assets.

J.D. Nelson, chief investment officer at RhumbLine Advisors Corp., Boston, said investors receive 75 to 80 basis points over a straight equity index by using enhanced indexing.

"Enhanced products are really where the (index) industry as a whole is going," he said. "Very few people are talking about straight indexes now. If they are, they will probably do it internally. An enhanced index is closer to active management but it is still passive."

Mr. Buckalew said while enhanced indexes can provide a higher return, the fees also might be higher.

"I can't verify any trend away from replication indexes; however, enhanced indexing jumps fees up substantially, less than active management but a good deal more than for a replication index," he said.

Nicholas A. Lopardo, chief investment officer at State Street Bank and Trust Co., Boston, and Mr. Buckalew expect strong and growing interest in extended equity indexes such as the medium-capitalization indexes.

"We see great hopes for that concept in 1992 and beyond," said Mr. Lopardo.

Mr. Buckalew said: "We will see some very nice returns in both the short and long term in medium-capitalization indexes; it is an important new area for investment money." ■

Hirings is a section that details the appointments of money management firms for tax-exempt funds.

- It appears in each issue of *Pensions & Investments*.

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Lens

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the fund typically would hold less than 5% but up to 20% of a company's stock — could help enhance shareholder values. Mr. Monks said the presence of long-term investors such as Warren Buffet can buoy a company's stock value.

"By increasing the accountability of management to shareholders, the Lens (Fund) expects to generate value for all equity investors," the fund's prospectus said.

Mr. Monks also asserted — and observers agreed — the large amount of investment in index strategies has created new opportunities for investors. Thus, he is targeting major public funds with substantial equity index holdings as potential clients. The Lens Fund gives them the chance to enhance value with the "rotten apples" held in their index funds, he said.

For a $20 billion to $25 billion public pension fund with $10 billion of its assets held in indexed stocks, a $200 million commitment is "minuscule," Mr. Monks said.

Institutional Shareholder Partners Inc., the Washington-based shareholder advocacy firm of which Mr. Monks is president, is the Lens fund's general partner and has committed $10 million to the fund.

The Lens Fund could exert a powerful influence at targeted companies through its investments, other shares held by Lens participants and support of other shareholders.

Observers deem the participation of the $66 billion California Public Employees' Retirement System, Sacramento, crucial to the Lens Fund's success. Richard Koppes, general counsel of the California fund, which is a long-time ally and client of Mr. Monks, said the Lens Fund is "a valid idea," but declined to comment further because the pension fund is reviewing the vehicle.

The Lens Fund's investment adviser, Batterymarch Financial Management, Boston, has developed a universe of 150 large, underperforming stocks, winnowed from 1,000 stocks by nine quantitative screens, including the five-, three- and one-year relative returns, return on equity and institutional ownership. Batterymarch also employs screens known as "acid cash," a measure of whether a company generates or consumes cash, and "strategic momentum," to determine whether the company is about to turn around.

Surviving companies then are evaluated for having a defensive, inward-looking culture, signs of management entrenchment or evidence of management incompetence.

Topping the list of potential targets is **Champion International Corp.** Other companies include: **Scott Paper Co.**; **Sears, Roebuck & Co.**; **Chrysler Corp.**; **Tenneco Inc.**; **Chase Manhattan Corp.**; **Mead Corp.**; **TRW Inc.**; and **American Express Co.**

Active investments will be made in no more than two stocks at a time, with the final choices handpicked. Some industry professionals question whether the fund would be adequately diversified, but Mr. Monks said investments would have to be viewed in the context of an investor's overall stock holdings.

While Mr. Monks said the goal of the fund would be to align the interests of management and shareholders, some observers doubted the fund's claim that it would be neither friendly nor hostile to management.

Given Mr. Monks' history in taking on corporate management and his penchant for publicity, some sources said corporate managers would view any investment by the fund as hostile. Mr. Monks' efforts at assisting Dallas investor Harold Simmons in his challenge to Lockheed Corp. in 1990 and Mr. Monks' recent attempts to gain a board seat at Sears have made him a pariah with some corporate executives.

"If I were a corporate management and had him buy in, I'd be terrified," one investment banking source said.

But practical concerns also affect funds that seek to go in on a friendly basis.

Allied Investment Partners will rely on four chief executives to sit on the boards of portfolio companies, including H. Brewster Atwater Jr., chairman and chief executive officer of General Mills Inc., Minneapolis. Sources questioned whether Allied Investment Partners would find many managements willing to invite in corporate executives to steer them in the right direction. "Most of the managers I know who are running poorly performing companies tend to be more insecure than managers of better-performing companies," said Mr. Jacobs, the author.

Some also asked how Mr. Atwater and the other three corporate executives he's recruiting to serve on portfolio company boards would have the time to help turn the companies around.

Ned Whitney, managing director of corporate finance at Dillon, Read, said the fund will be seeking undervalued companies that already have a sound business strategy and management team in place. Mr. Whitney also said the chief executives are all used to juggling a number of responsibilities.

Some also questioned the effectiveness of Corporate Partners in finding investments, although that fund searches for good management that needs long-term capital.

"If a company isn't under a (takeover) threat, it's a rare situation where a board or company is going to admit they need money or direction," said Herbert Denton, president of Providence Capital, a New York-based investment banking firm.

Jonathan Kagan, managing director for Corporate Partners, said the pool has invested $900 million in six companies, only one of which — Polaroid Corp. — involved a takeover threat. He added high equity values have slowed efforts to make additional investments.

Another problem for such funds is that it's "hard to measure the impact of good governance with total returns" and the lengthy time commitment involved, Mr. Denton said.

Despite the problems, many think the time might be ripe for such vehicles. "It makes sense simply because shareholders are supposed to be owners," said Sarah Teslik, executive director of the Council of Institutional Investors, Washington. ■

TOM REED

Robert A.G. Monks wants to raise a total of $1 billion from public funds to acquire minority stakes in poor-performing companies.

Funds

Continued from page 1

With pension funds maturing, that will continue to go up."

He added some fund executives might have moved into bonds because they anticipated the big drop in interest rates. Bond returns, as measured by the Salomon Broad Investment Grade Bond Index were 16% for the year ended Sept. 30.

Interest in international investing by the Top 200 funds continued to grow — by 49% to $68.2 billion among defined benefit plans as of Sept. 30. International equity assets increased 50% and international fixed income, 51%.

The international equity market underperformed the U.S. market while overseas bond markets outperformed domestic ones.

When adjusted for market appreciation, international equity assets grew 23%, and international fixed-income assets grew 28% among defined benefit plans in the Top 200.

"Though the market appreciation for international equity was not as high as the S&P, the net flow to international market is greater than to the domestic market," Wilshire's Mr. Nesbitt said.

Indexed stocks and bonds continued to grow, but "indexing is not the rage it once was," Mr. Peyton said. Although assets in equity indexing among the Top 200 defined benefit plans grew 36.7% to $200 billion, the market-adjusted growth was 4%. Growth in indexed bonds equaled the bond market's appreciation for the year.

Alternative investments such as venture capital, leveraged buy-outs, private placements and oil and gas "were pretty dead in 1991" said Mr. Peyton.

Assets allocated to venture capital by the defined benefit plans of the Top 200 funds grew to $5.9 billion as of Sept. 30 from $5 billion a year earlier; leveraged buy-outs, to $6.9 billion from $5.7 billion; and private placements, to $10.7 billion from $10.5 billion. Oil and gas lost 11.1% to $800 million from $900 million.

"1991 was a tough year for private equity," said Gary Robertson, an investment consultant specializing in alternative investments at Callan. "There's a lot of romance, but not a lot of marriages."

Pension executives are interested in alternative investments, Mr. Robertson said, but use of them is stymied by corporate concerns about liquidity and public funds' tendency to be more conservative investors.

Real estate equity assets grew 1% to $50.6 billion, despite negative returns for the Russell-NCREIF Property Index. The index returned -2.3%. Consultants said much of the new money went to opportunistic funds.

Mortgages dropped 9.6% to $21.6 billion. Mr. Nesbitt was surprised at the decline: "We've seen significant positive growth in mortgages."

J.P. Morgan's Mr. Schappert agreed, speculating basic concerns about the real estate market, coupled with credit problems and declining interest rates (which expose investors to prepayment risk) might have contributed to the decline.

Among the largest 200 pension funds, total assets grew 18% to $1.67 trillion. Top 200 defined benefit plans gained 17%, to $1.316 trillion, but assets actually declined more than 2% when adjusted for market appreciation. Top 200 defined contribution plans grew 22% to $332 billion, or 5.7% above market appreciation.

Public funds in the Top 200 recorded the largest growth, 22%, vs. 12% for corporate funds. "Public funds are the only ones making contributions," Mr. Peyton noted. In addition, the public sector has added more employees — and therefore more plan participants — than the corporate sector. ■

GICs

Continued from page 2

and other insurance companies. GAPPA is asking them "to assist us in dealing with" the American Council of Life Insurance and the National Organization of Life and Health Guaranty Associations, Mr. Corcoran said.

NOLHGA has not been moving very quickly to resolve the situation, he noted.

Holders of Executive Life's GICs will get only 72 cents on the dollar under the current reorganization plan. Minnesota will pay the extra 28 cents for the GICs in the accounts of state residents.

Pension executives were heartened by the Minnesota board's move because other states might follow its lead, preventing huge losses for their pension plans.

"We're hoping others will sit up and take notice," said one pension executive whose plan holds Executive Life GICs.

The legal question is whether the GICs bought by pension funds qualify as so-called allocated contracts, which are guaranteed by the states. Life insurance policies are accepted as allocated contracts, for example, while the First Executive municipal GICs have been held by the industry to be unallocated contracts. The municipal GICs were issued by municipal agencies, not Executive Life, but the proceeds went directly into funding agreements at Executive Life. Pension funds did not invest in the municipal contracts.

"The pension GICs are allocated contracts that deal with individuals," Mr. Corcoran maintains. "The position of the (insurance) industry is that individuals are not involved. That's not true about the pension GICs. The pension GICs are clearly individual investment products and should be covered."

Eden Sarfati, president of NOLHGA, was unavailable for comment.

By deciding to make up the cost difference, the Minnesota board in effect is treating the pension GICs as allocated contracts.

Minnesota's decision to make up the shortfall will cost the state at least $60 million based on the GIC holdings of residents working for Honeywell Inc., Minneapolis, and Unisys Corp., Blue Bell, Pa., alone, according to the Minnesota Department of Commerce.

Minnesota officials don't have a total figure yet. ■

Firm creates new insurer ratings

NEW YORK — Fitch Investors Services Inc. is offering "a new approach" to analyzing and rating life insurance companies that it thinks will help restore confidence in credit ratings.

Rating agencies were embarrassed in 1991 when highly rated First Executive Life Insurance Co. and Mutual Benefit Life Insurance Co. both took a powder and were taken over by state regulators. And with the subsequent pell-mell downgrading of insurance companies in the spring and summer, the insurance industry's popular guaranteed investment contracts have taken a beating.

Enter New York-based Fitch and its new ratings service. Fitch says its new style would take a more detailed look at both the asset and liability sides of insurer balance sheets and give a more credible rating than had been done before. It would even hire outside experts to look at particular parts of the portfolio — like commercial real estate.

"Life insurance companies have been one of the hardest of the financial services to analyze," said Neil Barron, Fitch chief counsel.

Insurance analysts for money managers agree Fitch's approach has merit. "If they can do exactly what they are planning to do, it can definitely add value," said Steve Zonca, manager of credit analysis for Certus Financial Corp., San Francisco.

"I would consider it to be a very detailed understanding. I welcome it," said Christopher Holmen, senior investment analyst for Morley Capital Management, Lake Oswego, Ore., the nation's largest GIC manager. "The insurance industry is still a very strong industry. This would be able to demonstrate how strong it is."

The willingness of insurers to pay for this new ratings approach is the key to the success of the service, Mr. Barron said. ■